

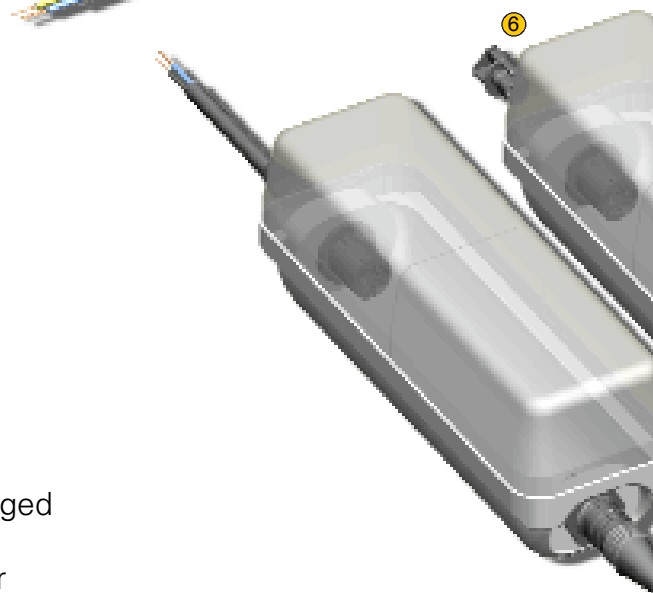
1 Connectors

Connectors can be prepared on-site. Amongst other functions they serve as an incoming supply for the **gesis** IP+ system. Connectors with female and male components are supplied complete with strain relief and enable the connection of all current cable types. A special variant also enables the connection of illumination cables for decorative lighting. Depending on the requirement, the connectors are available with spring-loaded or screw technology.



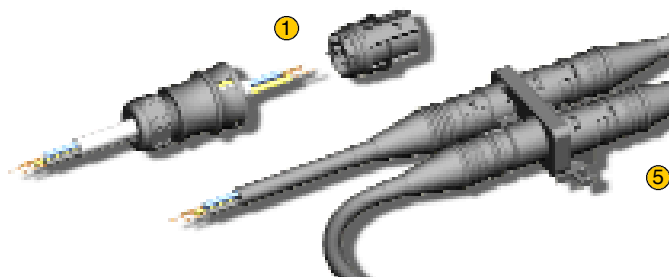
2 Connectors, twin connection

Connectors can be prepared on-site and are used for the through wiring of electrical loads (luminaries). All the connectors are supplied complete with a strain relief and enable the connection of all current cable types. Depending on the requirement, the connectors are available with spring-loaded or screw technology.



3 Appliance couplers

Appliance couplers are integrated in corresponding bore holes in the housing of devices and form the interface of the device to the **gesis** IP+ system. The couplers can therefore be simply plugged in on-site and integrated into the installation. Two spring-loaded connections are available per pole for internal wiring.



4 Cable assemblies

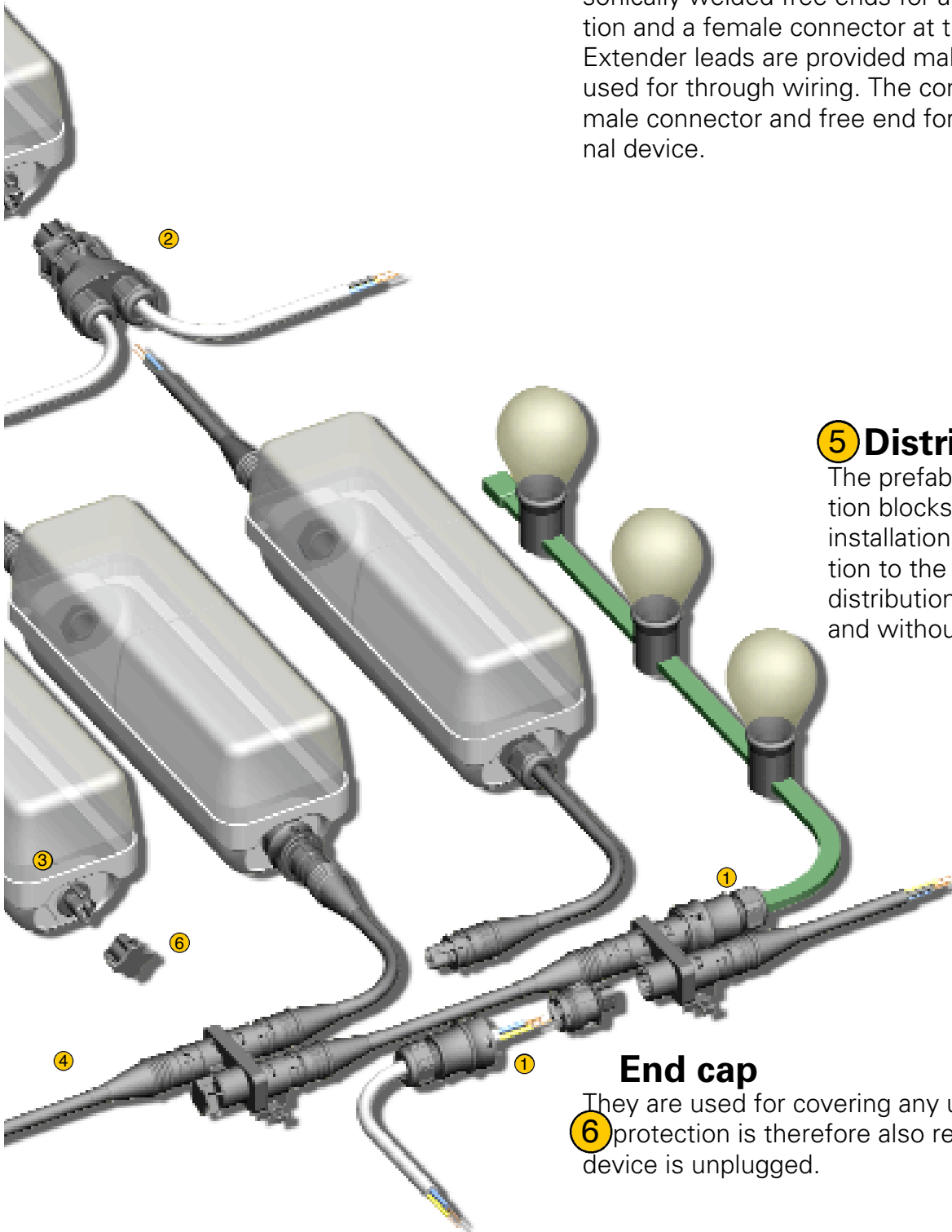
The supply of electrical energy is implemented using prefabricated cable assemblies. There is a distinction between three basic versions: starter leads provide the incoming supply of the **gesis** IP+ system. Ultrasonically welded free ends for a conventional connection and a female connector at the outgoing end. Extender leads are provided male to female and are used for through wiring. The connection lead has a male connector and free end for wiring to the terminal device.

5 Distribution block

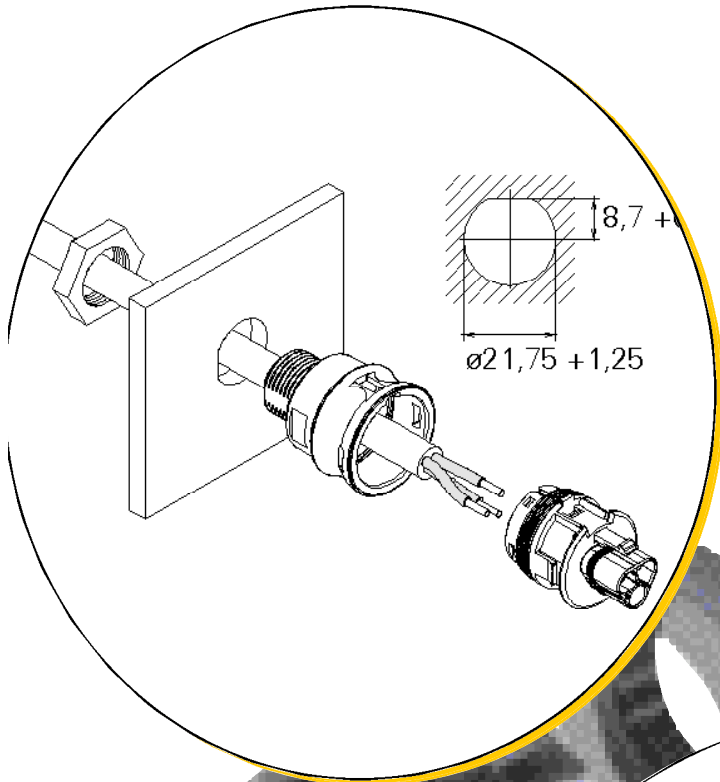
The prefabricated, plug-in distribution blocks are integrated in the installation and thus enable a junction to the terminal devices. The distribution block is available with and without fixing options.

End cap

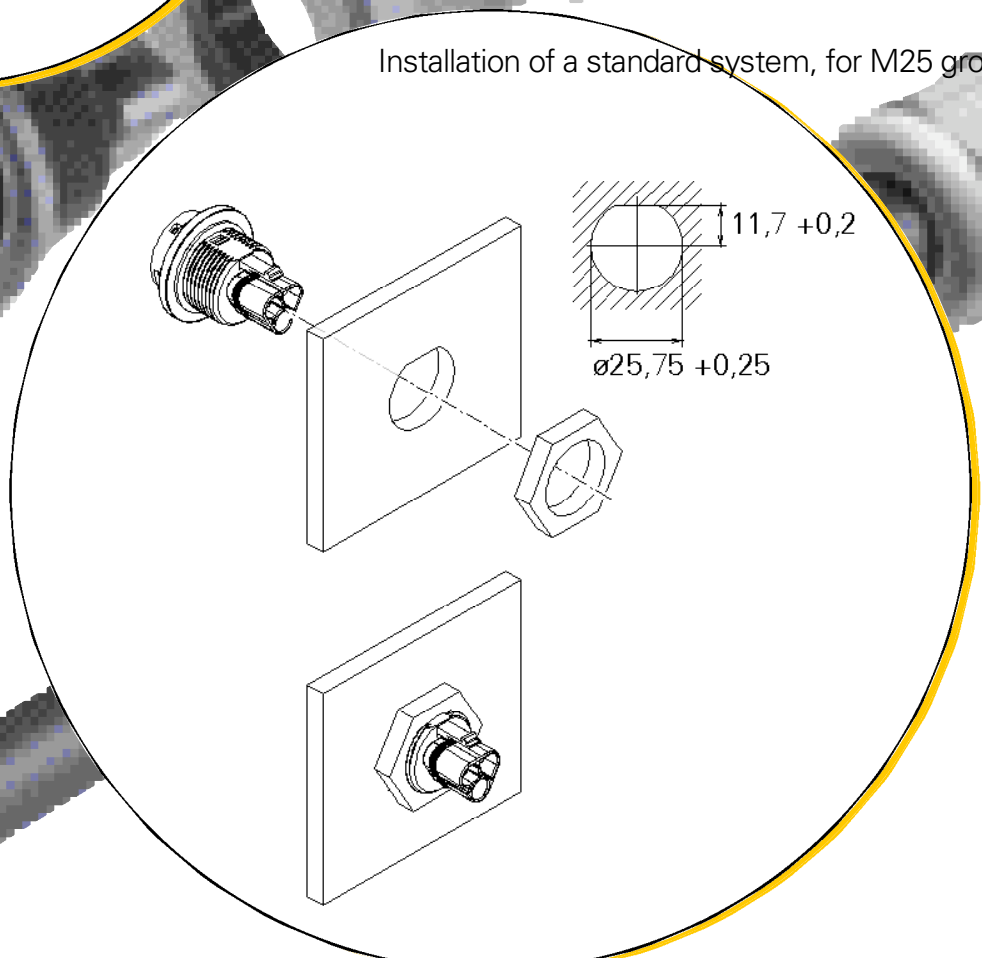
They are used for covering any unused contacts. The **6** protection is therefore also retained when the device is unplugged.



Simple installation: insertion in device
Installation of a modular system, for M20 grommets

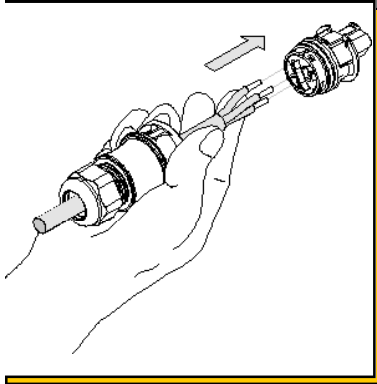


Installation of a standard system, for M25 grommets

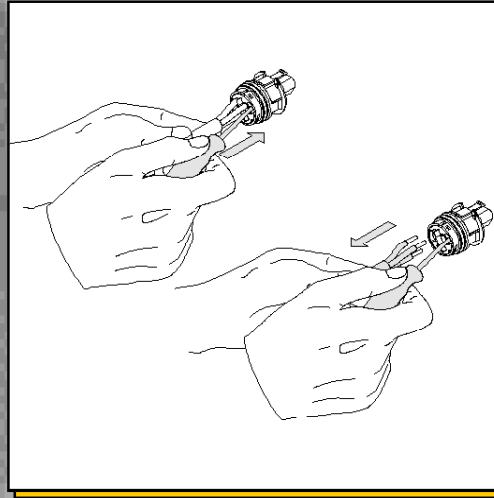


Simple handling

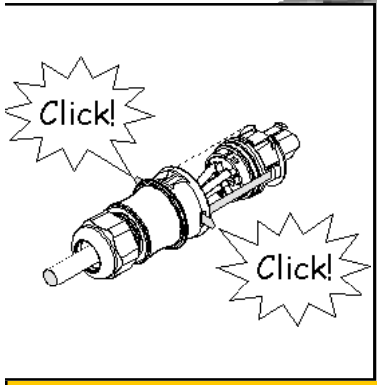
Connect the conductor



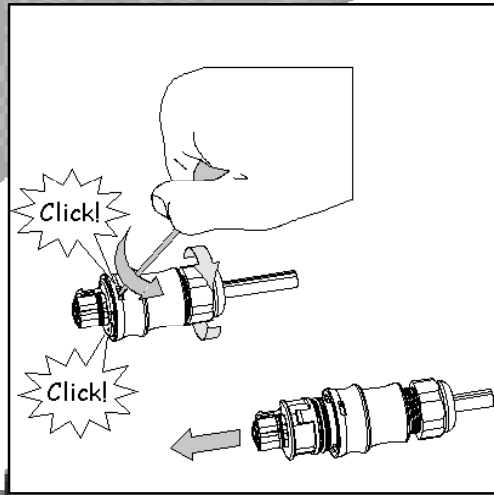
...and disconnect



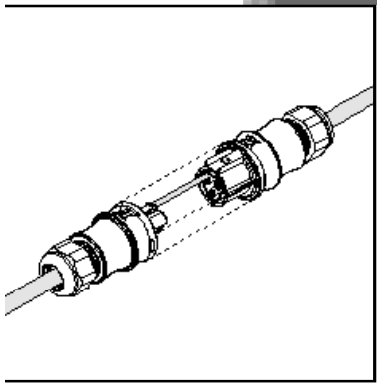
Close



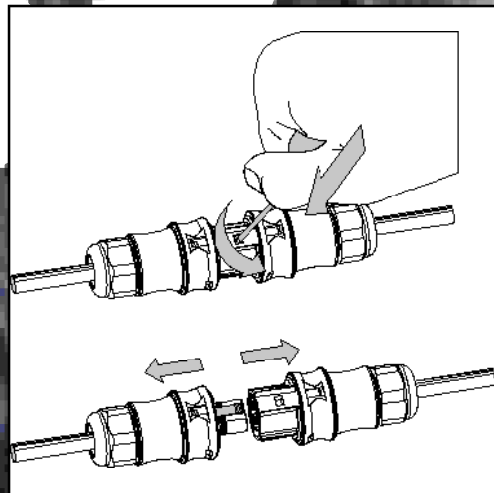
...and open

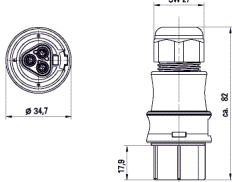
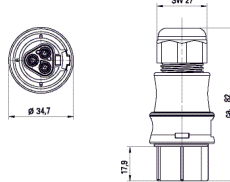
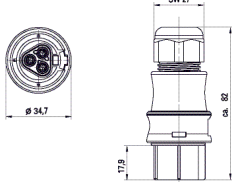
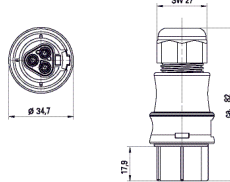




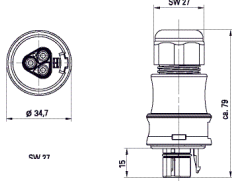
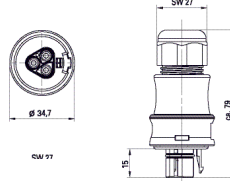
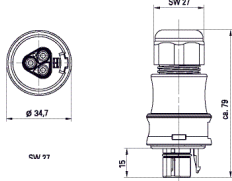
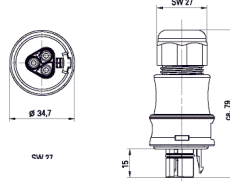




Lock



... and unlock



		Connector		Connector		Connector, twin connection		Connector, twin connection	
		<p>With spring loaded connection for rigid cables of 0,5 - 2,5 mm², finely stranded cables from 0,5 - 1,5 mm² with ferrules, stranded cables from 0,75 - 1,5 mm² with ferrules, unassembled with cable screwed joint¹⁾ and locking device.</p> <p>See "Technical data" for insulation and sheath strip lengths as well as the ferrules that should be used.</p>		<p>With screw connection for rigid, finely stranded and stranded cables from 1,5 mm² - 4,0 mm². Unassembled with cable screwed joint¹⁾ and locking device.</p> <p>See "Technical data" for insulation and sheath strip lengths.</p>		<p>With spring loaded connection for rigid cables 0,5 - 2,5 mm², finely stranded cables 0,5 - 1,5 mm² with ferrules, stranded cables 0,75 - 1,5 mm² with ferrules. Unassembled with cable screwed joint¹⁾ and locking device.</p> <p>See "Accessories" for mounting plate for fixing the twin connection.</p> <p>See "Technical data" for insulation and sheath strip lengths as well as the ferrules that should be used.</p>		<p>With screw connection for rigid, fine stranded and stranded cables 1,5 mm² - 2,5 mm². Unassembled with cable screwed joint¹⁾ and locking device.</p> <p>See "Accessories" for mounting plate fixing the twin connection.</p> <p>See "Technical data" for insulation and sheath strip lengths.</p>	
Cable	Colour	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty
<h2>Female connector</h2>									
									
		Diameter 6 - 10 mm	grey black	96.031.0053.0 96.031.0053.1		96.031.4053.0 96.031.4053.1		96.031.0253.0 96.031.0253.1	
Diameter 10 - 14 mm	grey black	96.031.0153.0 96.031.0153.1		96.031.4153.0 96.031.4153.1		96.031.0353.0 96.031.0353.1		96.031.4353.0 96.031.4353.1	
Cable	Colour	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty
<h2>Male connector</h2>									
									
		Diameter 6 - 10 mm	grey black	96.032.0053.0 96.032.0053.1		96.032.4053.0 96.032.4053.1			
Diameter 10 - 14 mm	grey black	96.032.0153.0 96.032.0153.1		96.032.4153.0 96.032.4153.1					
for illumination cable H05RNH2-F 2 x 1,5 mm ²	grey black	96.032.0453.0 96.032.0453.1		96.032.4453.0 96.032.4453.1					

¹⁾ Cable screwed joint with bend protection on request

Appliance coupler standard, M25

Appliance coupler modular, M20

Distribution block 1I/3O

Distribution box

With thread M25x1,5, external screwed joint.
With spring-loaded technology for rigid cables of 0,5 - 2,5 mm², finely stranded cables from 0,5 - 1,5 mm² with ferrules, stranded cables 0,75 - 1,5 mm² with ferrules.
2 connections per pole. With locking device.
Fixing in position guaranteed by flattening out the thread.

See "Technical data" for insulation strip lengths as well as the ferrules that should be used.

With thread M20x1,5, internal screwed joint.
With spring-loaded connection for rigid cables of 0,5 - 2,5 mm², finely stranded cables from 0,5 - 1,5 mm² with ferrules, stranded cables 0,75 - 1,5 mm² with ferrules.
2 connections per pole. With locking device.
Fixing in position guaranteed by flattening out the thread.

See "Technical data" for insulation strip lengths as well as the ferrules that should be used.

With locking device
1 input, 3 pole male component
3 outputs, 3 pole female component

The individual distribution boxes offer optimum solutions for your specific application. The distribution boxes are available in different dimensions and can accept DIN rail mounted devices and terminals in any combination. Further connection to the terminal device is carried out via the **gosis** IP+ connector system. Distribution boxes are manufactured and tested to specific customer requirements can be delivered to the installation site as preassembled units. Locking devices are already integrated.

Colour	Part no.	Box Qty	Part no.	Box Qty	Colour	Part no.	Box Qty
with fixing options							
grey black	96.031.1053.0 96.031.1053.1		96.031.2053.0 96.031.2053.1			96.030.0153.0 96.030.0153.1	on request on request

Colour	Part no.	Box Qty	Part no.	Box Qty	Colour	Part no.	Box Qty
without fixing options							
grey black	96.032.1053.0 96.032.1053.1		96.032.2053.0 96.032.2053.1			96.030.0253.0 96.030.0253.1	

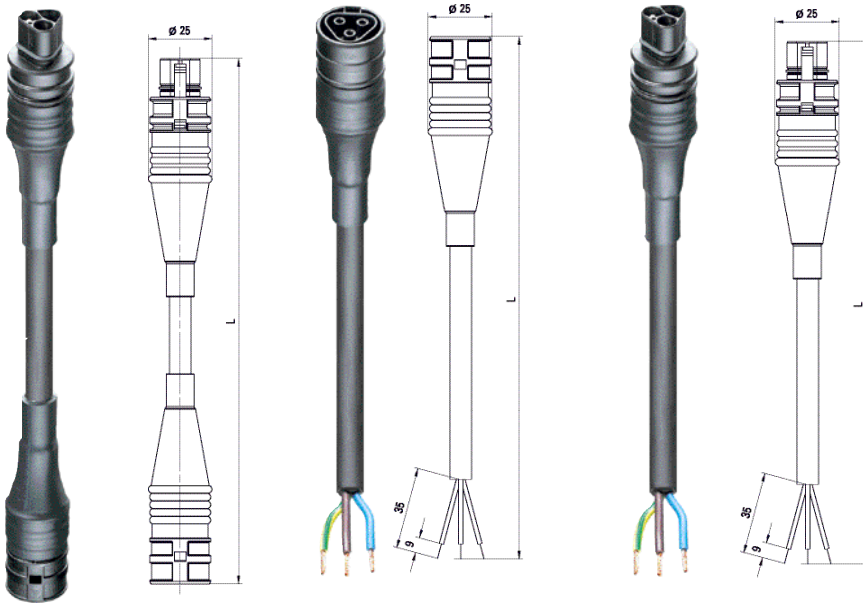
Cable assemblies 1,5 mm²

			Extender lead		Starter lead		Connection lead	
			3 x 1,5 mm² Female - male with locking device		3 x 1,5 mm² Female – free end with ultrasonically welded conductor ends Sheath strip length: 35 mm Insulation strip length: 9 mm		3 x 1,5 mm² Male – free end with ultrasonically welded conductor ends and locking device Sheath strip length: 35 mm Insulation strip length: 9 mm	
Cable assemblies								
Cable ¹⁾	Colour	Length ²⁾	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty
H05VV	grey	1,0 m	96.232.1000.0		96.232.1003.0		96.232.1004.0	
		2,0 m	96.232.2000.0		96.232.2003.0		96.232.2004.0	
		3,0 m	96.232.3000.0		96.232.3003.0		96.232.3004.0	
		4,0 m	96.232.4000.0		96.232.4003.0		96.232.4004.0	
		5,0 m	96.232.5000.0		96.232.5003.0		96.232.5004.0	
		6,0 m	96.232.6000.0		96.232.6003.0		96.232.6004.0	
		7,0 m	96.232.7000.0		96.232.7003.0		96.232.7004.0	
		8,0 m	96.232.8000.0		96.232.8003.0		96.232.8004.0	
	Cable: black	1,0 m	96.232.1000.1		96.232.1003.1		96.232.1004.1	
		2,0 m	96.232.2000.1		96.232.2003.1		96.232.2004.1	
		3,0 m	96.232.3000.1		96.232.3003.1		96.232.3004.1	
		4,0 m	96.232.4000.1		96.232.4003.1		96.232.4004.1	
		5,0 m	96.232.5000.1		96.232.5003.1		96.232.5004.1	
		6,0 m	96.232.6000.1		96.232.6003.1		96.232.6004.1	
		7,0 m	96.232.7000.1		96.232.7003.1		96.232.7004.1	
		8,0 m	96.232.8000.1		96.232.8003.1		96.232.8004.1	
H07RNF	grey	1,0 m	96.232.1030.0		96.232.1033.0		96.232.1034.0	
		2,0 m	96.232.2030.0		96.232.2033.0		96.232.2034.0	
		3,0 m	96.232.3030.0		96.232.3033.0		96.232.3034.0	
		4,0 m	96.232.4030.0		96.232.4033.0		96.232.4034.0	
		5,0 m	96.232.5030.0		96.232.5033.0		96.232.5034.0	
		6,0 m	96.232.6030.0		96.232.6033.0		96.232.6034.0	
		7,0 m	96.232.7030.0		96.232.7033.0		96.232.7034.0	
		8,0 m	96.232.8030.0		96.232.8033.0		96.232.8034.0	
	Cable: black	1,0 m	96.232.1030.1		96.232.1033.1		96.232.1034.1	
		2,0 m	96.232.2030.1		96.232.2033.1		96.232.2034.1	
		3,0 m	96.232.3030.1		96.232.3033.1		96.232.3034.1	
		4,0 m	96.232.4030.1		96.232.4033.1		96.232.4034.1	
		5,0 m	96.232.5030.1		96.232.5033.1		96.232.5034.1	
		6,0 m	96.232.6030.1		96.232.6033.1		96.232.6034.1	
		7,0 m	96.232.7030.1		96.232.7033.1		96.232.7034.1	
		8,0 m	96.232.8030.1		96.232.8033.1		96.232.8034.1	


¹⁾ Other cable types on request

²⁾ Other lengths on request

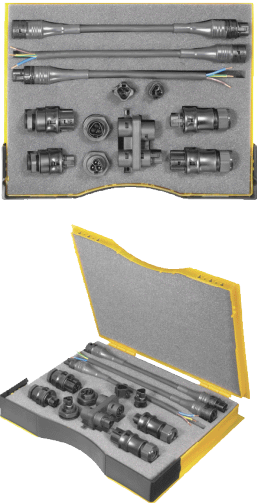
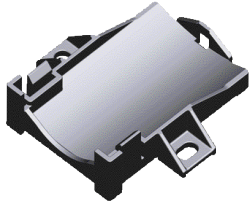
Extender lead	Starter lead	Connection lead
3 x 2,5 mm² Female - male with locking device	3 x 2,5 mm² Female - free end with ultrasonically welded conductor ends Sheath strip length: 35 mm Insulation strip length: 9 mm	3 x 2,5 mm² Male - free end with ultrasonically welded conductor ends and locking devices Sheath strip length: 35 mm Insulation strip length: 9 mm



Length ²⁾	Part no.	Box Qty	Part no.	Box Qty	Part no.	Box Qty
1,0 m	96.233.1000.0		96.233.1003.0		96.233.1004.0	
2,0 m	96.233.2000.0		96.233.2003.0		96.233.2004.0	
3,0 m	96.233.3000.0		96.233.3003.0		96.233.3004.0	
4,0 m	96.233.4000.0		96.233.4003.0		96.233.4004.0	
5,0 m	96.233.5000.0		96.233.5003.0		96.233.5004.0	
6,0 m	96.233.6000.0		96.233.6003.0		96.233.6004.0	
7,0 m	96.233.7000.0		96.233.7003.0		96.233.7004.0	
8,0 m	96.233.8000.0		96.233.8003.0		96.233.8004.0	
1,0 m	96.233.1000.1		96.233.1003.1		96.233.1004.1	
2,0 m	96.233.2000.1		96.233.2003.1		96.233.2004.1	
3,0 m	96.233.3000.1		96.233.3003.1		96.233.3004.1	
4,0 m	96.233.4000.1		96.233.4003.1		96.233.4004.1	
5,0 m	96.233.5000.1		96.233.5003.1		96.233.5004.1	
6,0 m	96.233.6000.1		96.233.6003.1		96.233.6004.1	
7,0 m	96.233.7000.1		96.233.7003.1		96.233.7004.1	
8,0 m	96.233.8000.1		96.233.8003.1		96.233.8004.1	
1,0 m	96.233.1030.0		96.233.1033.0		96.233.1034.0	
2,0 m	96.233.2030.0		96.233.2033.0		96.233.2034.0	
3,0 m	96.233.3030.0		96.233.3033.0		96.233.3034.0	
4,0 m	96.233.4030.0		96.233.4033.0		96.233.4034.0	
5,0 m	96.233.5030.0		96.233.5033.0		96.233.5034.0	
6,0 m	96.233.6030.0		96.233.6033.0		96.233.6034.0	
7,0 m	96.233.7030.0		96.233.7033.0		96.233.7034.0	
8,0 m	96.233.8030.0		96.233.8033.0		96.233.8034.0	
1,0 m	96.233.1030.1		96.233.1033.1		96.233.1034.1	
2,0 m	96.233.2030.1		96.233.2033.1		96.233.2034.1	
3,0 m	96.233.3030.1		96.233.3033.1		96.233.3034.1	
4,0 m	96.233.4030.1		96.233.4033.1		96.233.4034.1	
5,0 m	96.233.5030.1		96.233.5033.1		96.233.5034.1	
6,0 m	96.233.6030.1		96.233.6033.1		96.233.6034.1	
7,0 m	96.233.7030.1		96.233.7033.1		96.233.7034.1	
8,0 m	96.233.8030.1		96.233.8033.1		96.233.8034.1	

	End cap	Ferrules	Screwdriver	Crimping tool
	For covering unused male or female connectors.	Ferrules with insulating shrouds for conductors of 0,5 mm ² in accord. with DIN 46228-E0,5-10 0,75 mm ² in accord. with DIN 46228-E0,75-12 1,0 mm ² in accord. with DIN 46228-E1,0-12 1,5 mm ² in accord. with DIN 46228-E1,5-12 Materials: Shroud: polypropylene, thermal stability 105°C, resistant to creepage Tubes: copper with galvanised tin coating	Screwdriver in accordance with DIN 5264 0,4 x 2,5 For opening the terminal compartment of spring-loaded contacts	For clamping points in spring-loader technology for ferrules 0,08 - 6 mm ² , AWG 28 - 10 - square crimping - releasable positive lock-out device - adjustable crimping pressure Total length: 174 mm
	Colour	Part no. Box Qty	Part no. Size	Part no.
For covering unused male connectors				
	white grey red black	Z5.564.4553.0 Z5.564.4553.1	06.600.3827.0 0,5 mm ² 06.600.3727.0 0,75 mm ² 06.600.3627.0 1,0 mm ² 06.600.3927.0 1,5 mm ²	06.502.4300.0 95.101.1300.0
	Colour	Part no. Box Qty		
For covering unused female connectors				
	white grey red black	Z5.564.4453.0 Z5.564.4453.1		

Sample set

	<p>RST20i3 An ideal introduction to the system</p> <p>Contents: - Connector - Appliance couplers - Distribution box - Cable assemblies - End caps</p>									
Part no.										
										
	99.488.0000.0									
<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: right;">Colour</td> <td style="width: 20%; text-align: left;">Part no.</td> <td style="width: 60%; text-align: left;">Box Qty</td> </tr> </table>			Colour	Part no.	Box Qty					
Colour	Part no.	Box Qty								
<p>Mounting plate for connector, twin connection</p>										
<table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">white</td> <td style="width: 80%;">01.006.1553.0</td> </tr> <tr> <td>grey</td> <td></td> </tr> <tr> <td>red</td> <td></td> </tr> <tr> <td>black</td> <td>01.006.1553.1</td> </tr> </table>	white	01.006.1553.0	grey		red		black	01.006.1553.1		
white	01.006.1553.0									
grey										
red										
black	01.006.1553.1									

Protection types

Protection against contact	Protection against solid foreign bodies			
No protection	No protection	0	0	No protection
Large areas of the body (e.g. back of hand)	Large solid foreign bodies (Diameter > 50 mm)	1	1	Protection against dripping water falling vertically
Finger	Medium solid foreign bodies (Diameter > 12 mm)	2	2	Protection against dripping water falling at an angle (up to 15°)
Tools and wires (Diameter > 2,5 mm)	Small solid foreign bodies (Diameter > 2,5 mm)	3	3	Protection against water that is sprayed at an angle up to 60° towards the vertical
Tools and wires (Diameter > 1 mm)	Granular solid foreign bodies (Diameter > 1mm)	4	4	Protection against water that is splashed on all sides
Complete protection against accidental contact	Dust deposits	5	5	Protection against jet water
Complete protection against accidental contact	Penetration of dust	6	6	Protection against powerful jet water
			7	Protection against temporary submersion
			8	Protection against continuous submersion

In many applications, electrotechnical devices and systems must function reliably over many years under severe environmental conditions. The penetration of liquids or solid foreign bodies (e.g. dust, oil, rust etc.) in production plants, garages or outdoor installations must be prevented to ensure reliable operation. The requirements for IP protection vary from application to application. In protection type IP68, the limit conditions must be listed explicitly by the manufacturer (at least 1.50m and 30 minutes). The conditions must be agreed between the manufacturer and the user in this case

Material resistance (for materials PA66 aand NBR)


Please contact us in the event of differing influencing factors!			
Ultraviolet light (use black for connectors)	+	Motor oil (SAE 20W/55)	+
Resistance to oil and grease	+	Nickel chloride	+
Aliphatic hydrocarbons	+	Paraffin and paraffin derivatives	+
Aromatic hydrocarbons	+	Phosphoric acid	+
Alcohol	+	Phthalic acid	+
Ammonia, water-free	+	Polyamide resin	+
Ammonium chloride (ammoniac)	+	Polyester-polyole	+
Ammonium sulphate	+	Polyether-polyole	+
Barium chloride	+	Polyglycol	+
Beer	+	Polymer softener	+
Butter	+	Polyurethane resin	+
Butyl alcohol	+	Mercury	+
Calcium chloride, aqueous, 10%	+	Castor oil	+
Citric acid, aqueous, 10%	+	Ammoniac	+
Iron III chloride	+	Oxygen, RT	+
Ethyl ether	+	Lubricating oil (O-149), (not bunker oil, tanker)	+
Dyes, paints, not strong in sulphuric acid	+	Sulphur, wet	+
Fruit juices, fruit acids	+	Sulphuric acid (verd, RT)	+
Tannic acid	+	Sulphur hexafluoride	+
Glycerine	+	Sweat	+
Glystantin, aqueous, 40%	+	Sebacin acid	+
Potassium chloride	+	Spirits	+
Globules of fat, aqueous, 10%	+	Nitric acid (10%)	+
Common salt, aqueous, 10%	+	Hydrochloric acid	+
Linseed oil	+	Water, RT, chlorine-free up to 80°C	+
Milk	+	Water, resistant to seawater, artificial, 20°C	+
Lactic acid, 20°C	+	Tin IV chloride, 20°C, saturated	+

Technical data

Rated voltage:	250V
Rated current:	20A
No. of poles:	3 poles (L, N, PE)
Protection type:	Connectors and device connections: IP65, IP66, IP67, IP68 (3m; 2 hours) Distribution block and cable assemblies in preparation
Approvals (in process):	VDE; UL; CSA; LR; GL; DNV
Regulations:	DIN VDE 0606-200; draft IEC 23/337/FDIS; VDE 0110; VDE 0628; IEC60999; UL1977; CSA:C22.2 No.182.2-M1987; LR Type Approval System
Cable assemblies:	Crimp connection, H05VV-F or H07RN-F, 1,5mm ² and 2,5mm ² .
Cables with free end:	Sheath strip length 35 mm Insulation strip length 9 mm
Locking device:	Open using a tool: Insert the Philips screwdriver into the opening of the locking device and rotate by 90°
Materials:	Contact components: Brass with silver finish
Housing:	Thermoplastic PA
Sealing material:	NBR
Continuous temperature:	From -30°C to 100°C
Flame wire test 960°C:	For connectors and device connections
Coding:	Mechanical coding symbolised by colour coding. Grey and black colour coding with the same mechanical coding. Further coding is optional.
General:	Shock protection guaranteed in general, even when disconnected. Leading Earth conductor. Live component must be a socket component in accordance with the regulations. It is therefore not possible to install a ring circuit in the standardised design! Non-interchangeable with other connector systems; can only be connected with the correct polarity; 1 pole cannot make contact. Locking device in accordance with prEN 61 535.
Note:	Insertion and withdrawal under load is possible in accordance with DIN VDE 0625 Contacts secured against tensile load on the cable. All the components can be interlocked. A locking device must be provided following the approval in accordance with DIN VDE 0628.

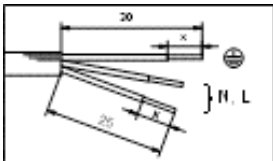
Insulation strip lengths and ferrules

Screw connection:

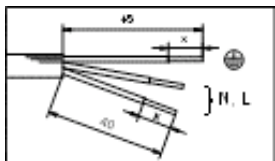


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Connector




Connector, twin connection



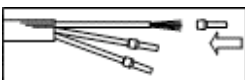
Conductor cross-section	1,5 mm ²	2,5 mm ²	4 mm ²
Solid	8	8	8
Finely stranded	8	8	8
Stranded	8	8	8
Ultrasonically welded	8	8	8

Spring-loaded connection:

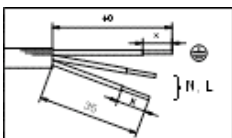


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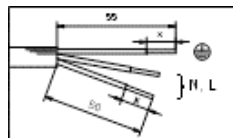
Finely stranded and stranded connectors



Connector and device connection



Connector, twin connection



Conductor cross-section	0,5 mm ²	0,75 mm ²	1 mm ²	1,5 mm ²	2,5 mm ²
Solid	14,5 + 1	14,5 + 1	14,5 + 1	14,5 + 1	14,5 + 1
Finely stranded	12,0 + 1	13,0 + 1	13,0 + 1	13,0 + 1	
Ferrule in accordance with DIN	46228-E-10	46228-E-12	46228-E-12	46228-E-12	
Stranded		13,0 + 1	13,0 + 1	13,0 + 1	
Ferrule in accordance with DIN		46228-E-12	46228-E-12	46228-E-12	
Ultrasonically welded				14,5 + 1	14,5 + 1