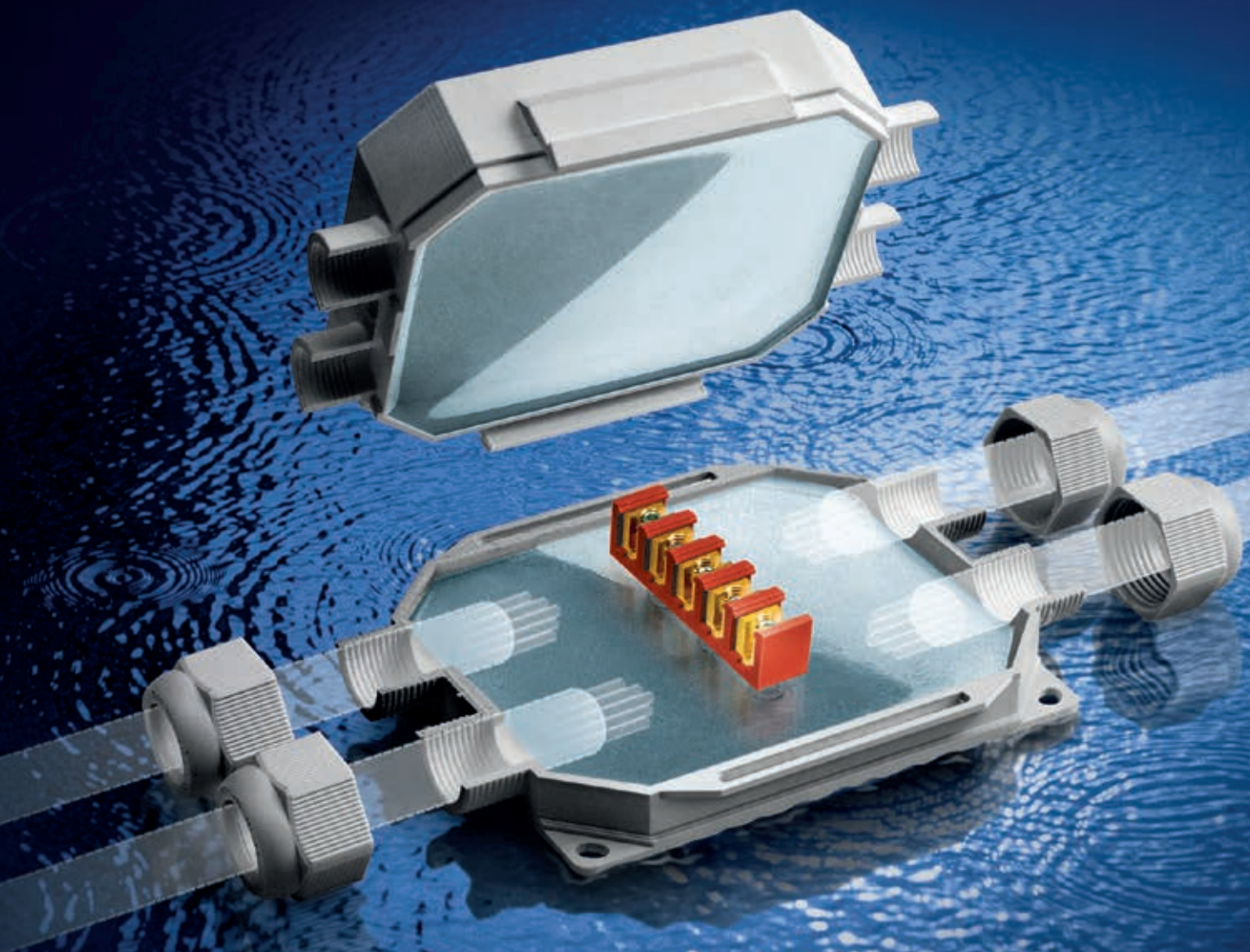


GEL CONNECTION

WATERPROOF ACCESSORIES FOR BIG INSTALLATIONS

Revolutionary Boxes

IPX8
IP68
OFFICIALLY
TESTED



**Ray
tech**®

CABLE ACCESSORIES COMPANY

GEL CONNECTION

WATERPROOF ACCESSORIES FOR BIG INSTALLATIONS



Happy



Happy Joint



Gel Box Line



Gel Cover Line



Nano Joint



Nano Mam - For



Bravo



Mini Bravo



Little Joint IP68



Ready Box IP68



Super Klik



Rapid Joint IP68



King Joint



Rapid Joint



Klik Fire



Magic Power Gel



*Magic Gel
& Magic Fluid*



Wonder Gel



Techno Gel Gum

Ray tech®

CABLE ACCESSORIES COMPANY



Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB

Operating temperature

Installation temperature:
-40°C / +50°C

Fully submersible
Can be used underground

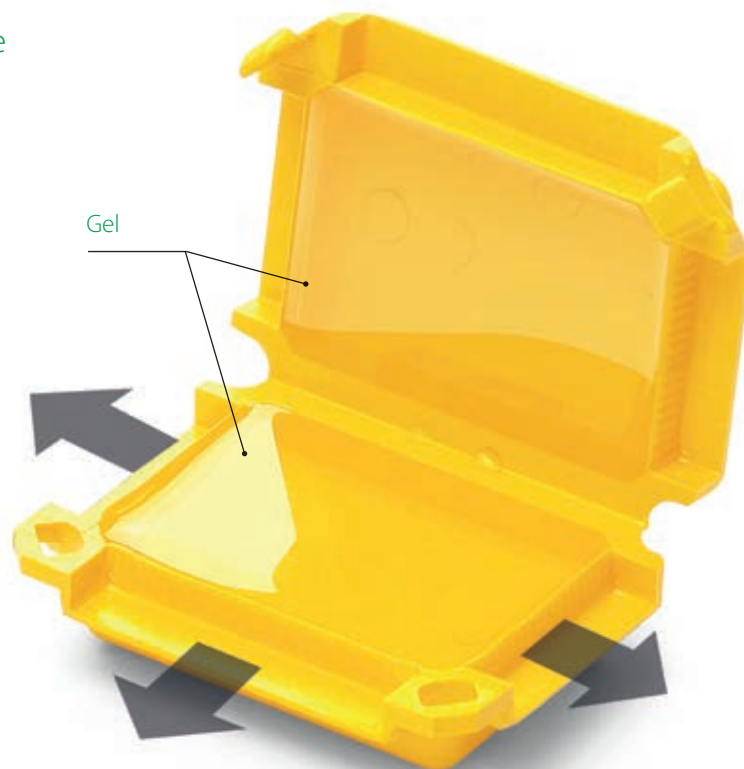
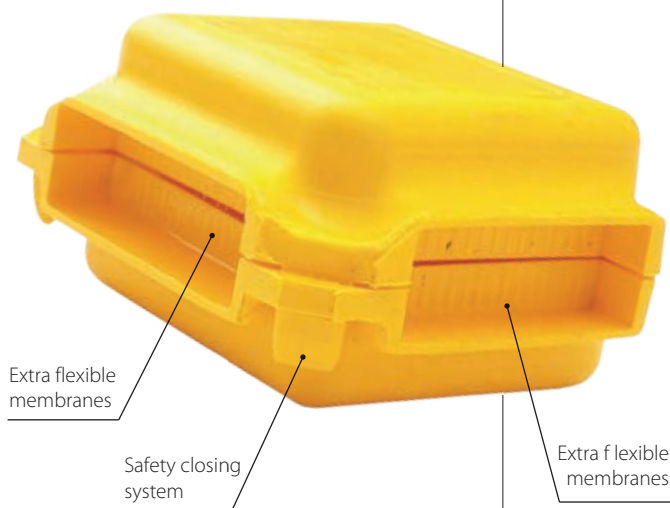
IPX8
OFFICIALLY
TESTED **IMQ**

Happy

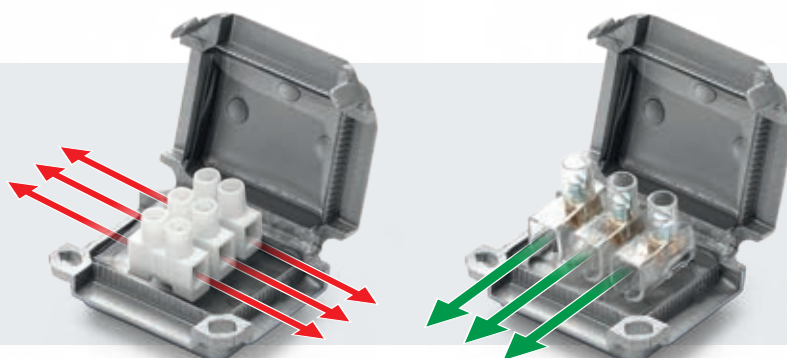
The revolutionary mini accessories with 3 entrances, pre-filled with gel and suitable for submersible installations (IPX8).

Designed in 3 dimensions to rapidly insulate and seal the most commonly used connectors. The 3 entrances not only guarantee the extreme flexibility in the range of these products but also by the housing accepting a wide variety of connectors.

- Extremely versatile - Ready to use - Re-enterable
- For rigid or flexible insulated wires up to 4 mm²
- Pre-filled with gel, non toxic and no shelf life
- Small compact and robust
- Halogen free
- UV resistant



Configuration examples



Happy 0

Product	Pieces	Color	Description	A x B x C (mm)
Happy 0	x 4	●	Blister	41 x 28 x 19
Happy 0 Box12	x 12	○	Box	

IDEAL FOR (or similar):



Happy 1

Product	Pieces	Color	Description	A x B x C (mm)
Happy 1	x 2	●	Blister	45 x 37 x 24
Happy 1 Box10	x 10	○	Box	

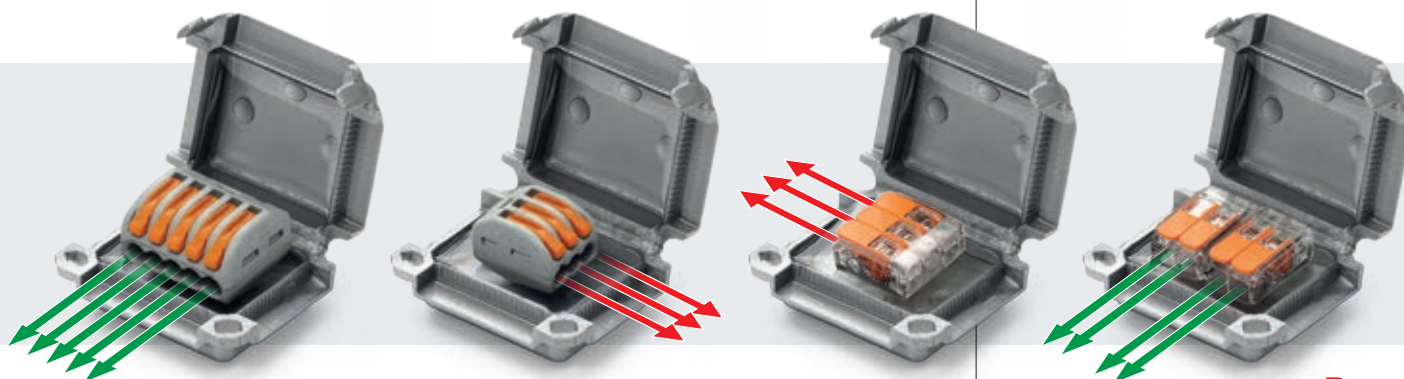
IDEAL FOR (or similar):



Happy 2

Product	Pieces	Color	Description	A x B x C (mm)
Happy 2	x 1	●	Blister	53 x 39 x 24
Happy 2 Box7	x 7	○	Box	

IDEAL FOR (or similar):








**Ray
Tech New**

Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB 

Operating
temperature 

Installation temperature: 
-40°C / +50°C

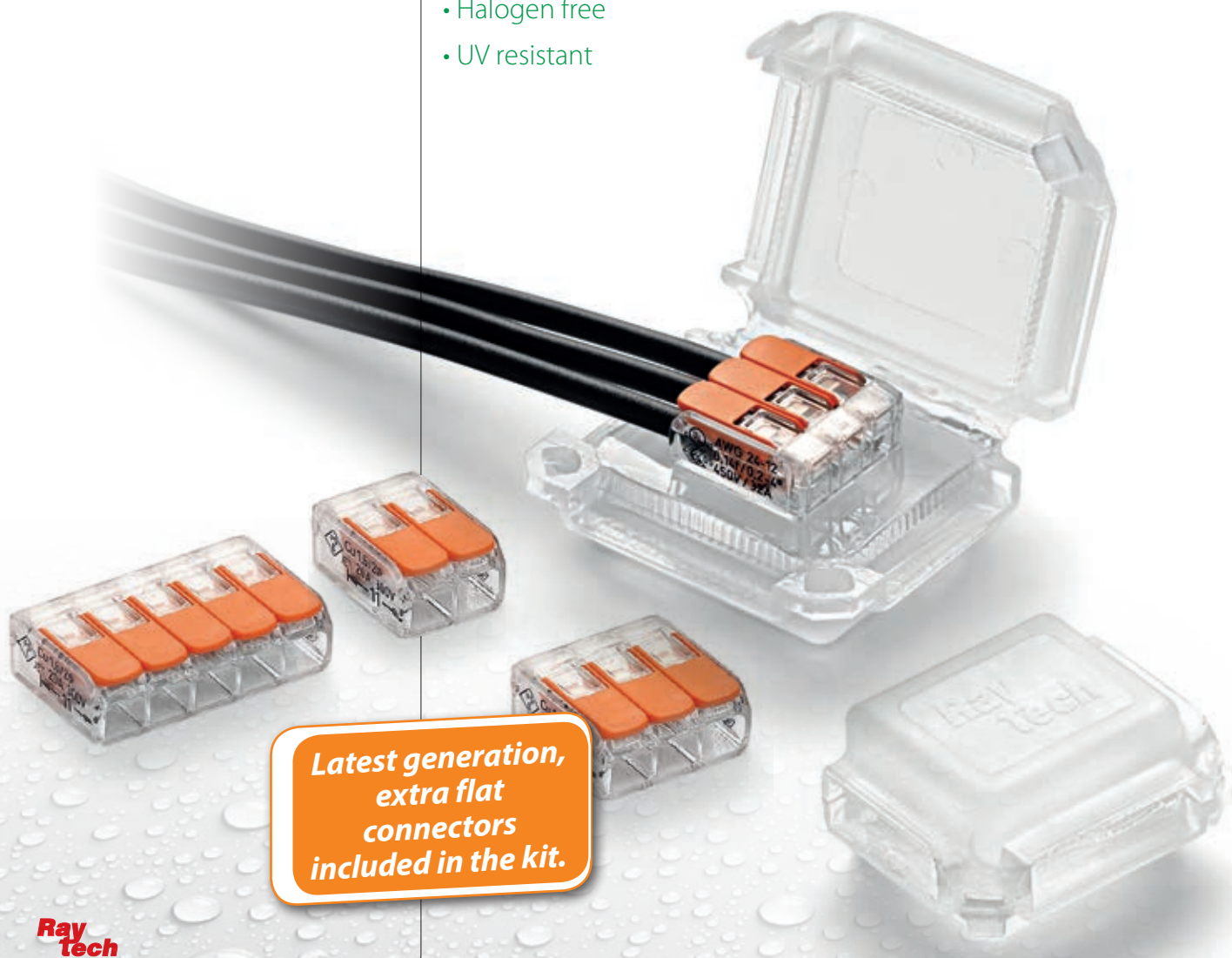
Fully submersible 
Can be used underground 

IPX8
OFFICIALLY
TESTED | **IMQ**

Happy Joint

The revolutionary mini accessories with 3 entrances, pre-filled with gel and suitable for submersible installations (IPX8) complete with connectors.

- Extremely versatile - ready to use - re-enterable
- Small, compact and robust
- No need for tools
- Pre-filled with gel, non toxic and no shelf life
- Can energise immediately
- For straight and branch connections
- For rigid or flexible insulated wires up to 4 mm²
- Up to 5 conductors on one phase or up to two conductors on two or three phases
- Halogen free
- UV resistant



*Latest generation,
extra flat
connectors
included in the kit.*

Happy Joint 3

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Happy Joint 3	3 x 1 - 4	2 through / 1 branch	4 pcs/ Blister	41 x 28 x 19



With one connector included for each Happy



Happy Joint 4

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Happy Joint 4	4 x 1 - 4	2 through / in/out	2 pcs/ Blister	45 x 37 x 24



With two connectors included for each Happy



Happy Joint 5

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Happy Joint 5	5 x 1 - 4	2 through / 3 branch	2 pcs/ Blister	45 x 37 x 24



With one connector included for each Happy



Happy Joint 6

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Happy Joint 6	6 x 1 - 4	3 through / in/out	1 pcs/ Blister	53 x 39 x 24



With three connectors included for each Happy



HAPPY JOINT 3


HAPPY JOINT 4

HAPPY JOINT 5

HAPPY JOINT 6




Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB 

Operating temperature 

Installation temperature: 
-40°C / +50°C

Fully submersible 

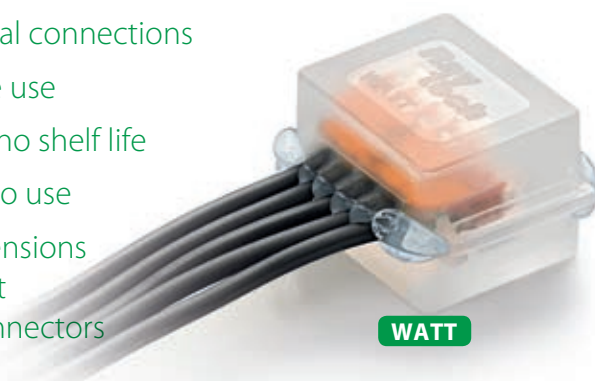
Can be used underground 

IPX8
OFFICIALLY
TESTED 

Gel Box Line

Pre-filled gel accessories for sealing, protecting and making safe electrical connections.

- To put household systems in order
- For civil and industrial connections
- Also for submersible use
- Non-toxic and with no shelf life
- Versatile and ready to use
- Designed with dimensions suitable for the most commonly used connectors
- Halogen free
- UV resistant



GEL BOX LINE
*a simple way
to bring indoor
connectors
outdoors*

JOULE

New

ISAAC

KELVIN

PASCAL

Gel

Isaac

Product	Description	Package	A x B x C (mm)
Isaac 4	x 4 pcs	Blister	30 x 27 x 23
Isaac 4 P30	x 30 pcs	Box	
Isaac 4 MP *	x 50 pcs	Multipack	

IDEAL FOR (or similar):



A x B x C (mm)

Pascal

Product	Description	Package	A x B x C (mm)
Pascal 6	x 2 pcs	Blister	36 x 37 x 26
Pascal 6 P15	x 15 pcs	Box	
Pascal 6 MP *	x 25 pcs	Multipack	

IDEAL FOR (or similar):



A x B x C (mm)

* Also available the flame retardant version in the following colours: yellow, orange, blue or black.



Watt

Product	Description	Package	A x B x C (mm)
Watt	x 2 pcs	Blister	30 x 42 x 26
Watt P15	x 15 pcs	Box	
Watt MP *	x 25 pcs	Multipack	

IDEAL FOR (or similar):



3x 2.5 mm²



2x + 2x 2.5 mm²



5x 2.5 mm²



2x + 2x 4 mm²



5x 4 mm²



A x B x C (mm)



Joule

Product	Description	Package	A x B x C (mm)
Joule	x 1 pcs	Blister	33 x 52 x 26
Joule MP *	x 20 pcs	Multipack	

IDEAL FOR (or similar):



2x + 2x + 2x 2.5 mm²



2x + 2x + 2x 4 mm²



A x B x C (mm)



Kelvin

Product	Description	Package	A x B x C (mm)
Kelvin	x 1 pcs	Blister	52 x 53 x 29
Kelvin P9	x 9 pcs	Box	
Kelvin MP *	x 20 pcs	Multipack	

IDEAL FOR (or similar):



3x 6 mm²

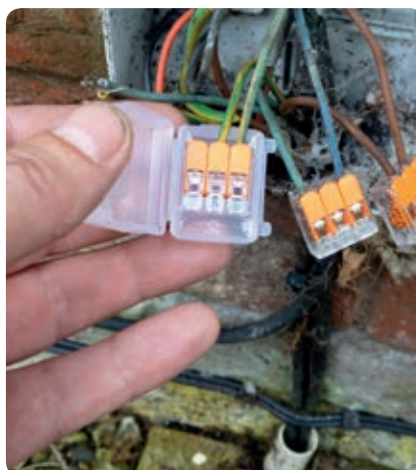


3x 6 mm²



A x B x C (mm)

Also available the flame retardant version in the following colours: yellow, orange, blue or black.



Gel Box Line Kit

Complete with connectors.

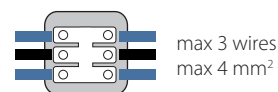
Pascal M2,5

Product	Description	Package	A x B x C (mm)
Pascal M2,5	12 pieces + 36 terminal blocks (2.5 mm ²)	Box	36 x 37 x 26



Kelvin M4

Product	Description	Package	A x B x C (mm)
Kelvin M4	6 pieces + 24 terminal blocks (4 mm ²)	Box	52 x 53 x 29



Watt +

Product	Description	Package	A x B x C (mm)
Watt + 1.5	10 pieces + 30 end connectors/terminal blocks (1.5 mm ²)	Box	30 x 42 x 26
Watt + 2.5	10 pieces + 30 end connectors/terminal blocks (2.5 mm ²)	Box	



Kelvin +

Product	Description	Package	A x B x C (mm)
Kelvin + 4	10 pieces + 30 end connectors/terminal blocks (4 mm ²)	Box	52 x 53 x 29
Kelvin + 6	10 pieces + 30 end connectors/terminal blocks (6 mm ²)	Box	
Kelvin 6+4	6 pieces + 20 end connectors/terminal blocks (4 mm ²)	Box	
Kelvin 6+6	6 pieces + 20 end connectors/terminal blocks (6 mm ²)	Box	





Electrical performance:
CEI EN 50393 with connectors
complying with EN 61238-1
(with testing under water head and water
between the cable cores)
Class 2 in accordance with CEI 64-8.

Gel: UL 94-HB 

Operating
temperature 

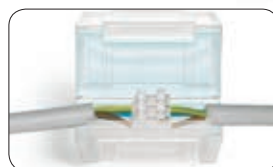
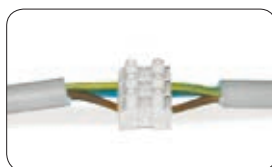
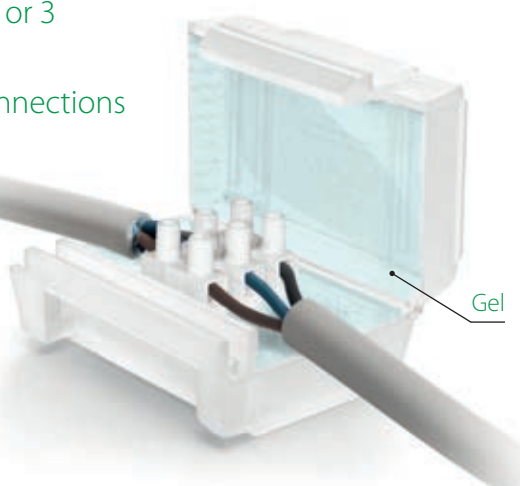
Installation temperature: 
-40°C / +50°C

IPX8
OFFICIALLY
TESTED **IMQ**

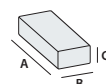
Gel Cover Line

Pre-filled gel accessories for straight connections,
for the protection, safety and covering of electrical
connections using strip connectors or alternatives.

- For 3 x 1 to 6 mm² cables or 3 insulated wires
- For civil and industrial connections
- To put household systems in order
- Also for underwater use
- Non-toxic and with no shelf life
- Halogen free
- UV resistant



OHM & BAR

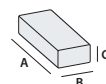


Product	Housed connectors type	Pieces for package	Package type	Dimensions A x B x C (mm)
OHM	2 from 4 mm ²	1	blister	61 x 35 x 28
OHMp11		11	box	
BAR	3 from 4 mm ² / 6 mm ²	1	blister	63 x 41 x 28
BARp9		9	box	



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Tech**

Mammut Gel Cover



Product	Housed connectors type	Pieces for package	Package type	Dimensions A x B x C (mm)
Gel Cover 4	2 from 4 mm ²	1	blister	61 x 35 x 28
Mammut Gel Cover		8	box	
Gel Cover 6	3 from 4 mm ² / 6 mm ²	1	blister	63 x 41 x 28
Mammut Gel Cover 6		6	box	

No flame propagation. CEI 20-35 • IEC 60332-1 • HD405-1 (as applicable). **Casing mix:** UL 94-V2

Installation examples





**Ray
Tech** *New*

Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB 

Operating
temperature 

Installation temperature: 
-40°C / +50°C

Fully submersible 

Can be used underground 

IPX8
OFFICIALLY
TESTED **IMQ**

Nano Joint

Pre-filled gel accessories to seal, protect and make safe electrical connections.

Inclusive of connectors

- Ready to use, quick, re-enterable!
- No tools required
- Can energise immediately
- For straight & branch connections
- For rigid or flexible insulated wires from 1 a 4 mm²
- For 1, 2 and 3 cores connections
- Up to 5 conductors on one phase or up to 2 conductors on two or three phase
- Small, compact and resistant
- No shelf life
- Halogen free
- UV resistant



NANO JOINT 3

NANO JOINT 5

NANO JOINT 6

*Latest generation,
extra flat
connectors
included in the kit.*

Nano 3

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano 3	3 x 1 - 4	2 through / 1 branch	4 pcs Blister	30 x 27 x 23



With one connector included for each Nano Joint



Nano 5

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano 5	5 x 1 - 4	2 through / 3 branch	2 pcs Blister	30 x 42 x 26



With one connector included for each Nano Joint



Nano 6

Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano 6	6 x 1 - 4	3 through / In/Out	1 pcs Blister	33 x 52 x 26



With three connectors included for each Nano Joint





**Ray
Tech** *New*

Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB 

Operating
temperature 

Installation temperature: 
-40°C / +50°C

Fully submersible 

Can be used underground 

IPX8
OFFICIALLY
TESTED **IMQ**

Nano Mam - For

Pre-filled gel accessories to seal, protect and make safe electrical connections. Inclusive of connectors.

- Ready to use, quick, re-enterable!
- Ideal for outdoor & underground installations, fully submersible
- Immediately energizable
- For rigid or flexible insulated wires from 1 a 4 mm²
- For 1, 2 or 3 cores connections
- Small, compact and resistant
- No shelf life
- Halogen free
- UV resistant



Nano Mam 2,5



Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano Mam 2,5	3 x 1 - 2,5	3 through	2 pcs/ Blister	36 x 37 x 26

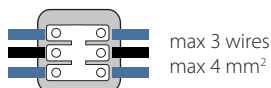


With one connector included for each Nano Mam

Nano Mam 4



Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano Mam 4	3 x 1,5 - 4	3 through	1 pcs/ Blister	52 x 53 x 29

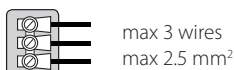


With one connector included for each Nano Mam

Nano For 2,5



Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano For 2,5	3 x 1 - 2,5	3 connections / In/Out	1 pcs/ Blister	33 x 52 x 26



With one connector included for each Nano For

Nano For 4



Product	Formation and wires cross section (Max N° x mm²)	Combination	Pieces for package	A x B x C (mm)
Nano For 4	3 x 1 - 4	3 connections / In/Out	1 pcs/ Blister	52 x 53 x 29



With one connector included for each Nano For





Electrical performance:
CEI EN 50393 as applicable
(testing under water head
of the accessory installed in a box)

Gel: UL 94-HB

Operating voltage: 0,6 / 1kV

Operating temperature

Installation temperature: -40°C / +50°C

Fully submersible

Can be used underground

IPX8
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TESTED

Bravo

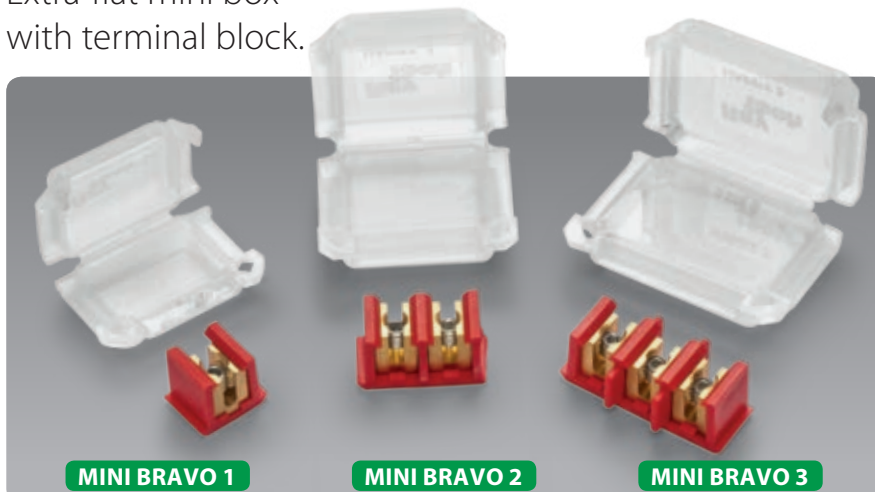
The first "Gel-Box" with integrated connectors!

- Ready to use, quick, re-enterable!
- For rigid or flexible insulated wires from 1 a 6 mm²
- Immediately energizable
- For straight & branch connections
- For 1 or 3 cores connections
- Small, compact and transparent
- No shelf life
- Halogen free and UV resistant

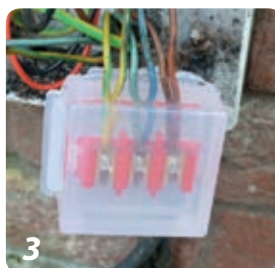
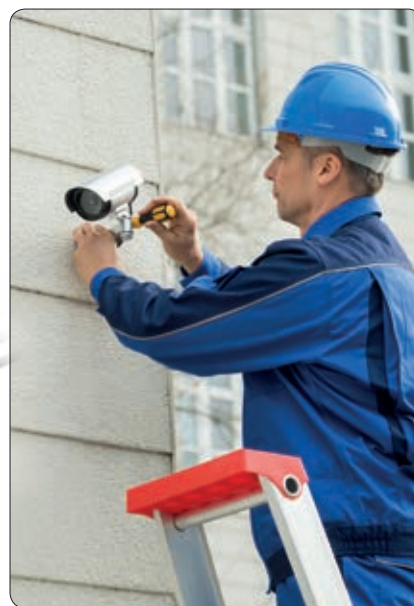
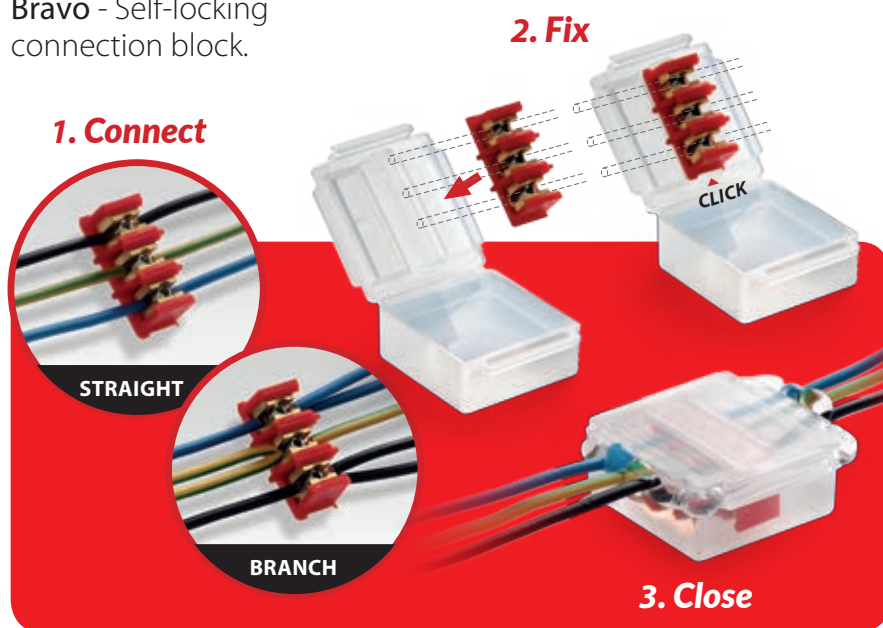


Mini Bravo

Extra-flat mini box
with terminal block.



Bravo - Self-locking connection block.



Bravo

Product	Formation and wires cross section		Pieces for package	 $A \times B \times C$ (mm)
	Straight or through (N° x mm ²)	Branch (N° x mm ²)		
Bravo 1-6	1 x 1 - 6	1 x 1 - 6	1 pcs/ Blister	50 x 29 x 22
Bravo 3-6	2 x 1 - 6 3 x 1 - 6	2 x 1 - 6 3 x 1 - 6	1 pcs/ Blister	53 x 49 x 22



Mini Bravo

Product	Formation and wires cross section		Pieces for package	 $A \times B \times C$ (mm)
	Straight or through (N° x mm ²)	Branch (N° x mm ²)		
Mini Bravo 1	1 x 1 - 4	1 x 1 - 4	3 pcs/ Blister	41 x 28 x 19
Mini Bravo 2	2 x 1 - 4	2 x 1 - 4	1 pcs/ Blister	45 x 37 x 24
Mini Bravo 3	3 x 1 - 4	3 x 1 - 4	1 pcs/ Blister	53 x 39 x 24





Electrical performance:
CEI EN 50393
as applicable

Gel: UL 94-HB

Operating temperature

Installation temperature:
-40°C / +50°C

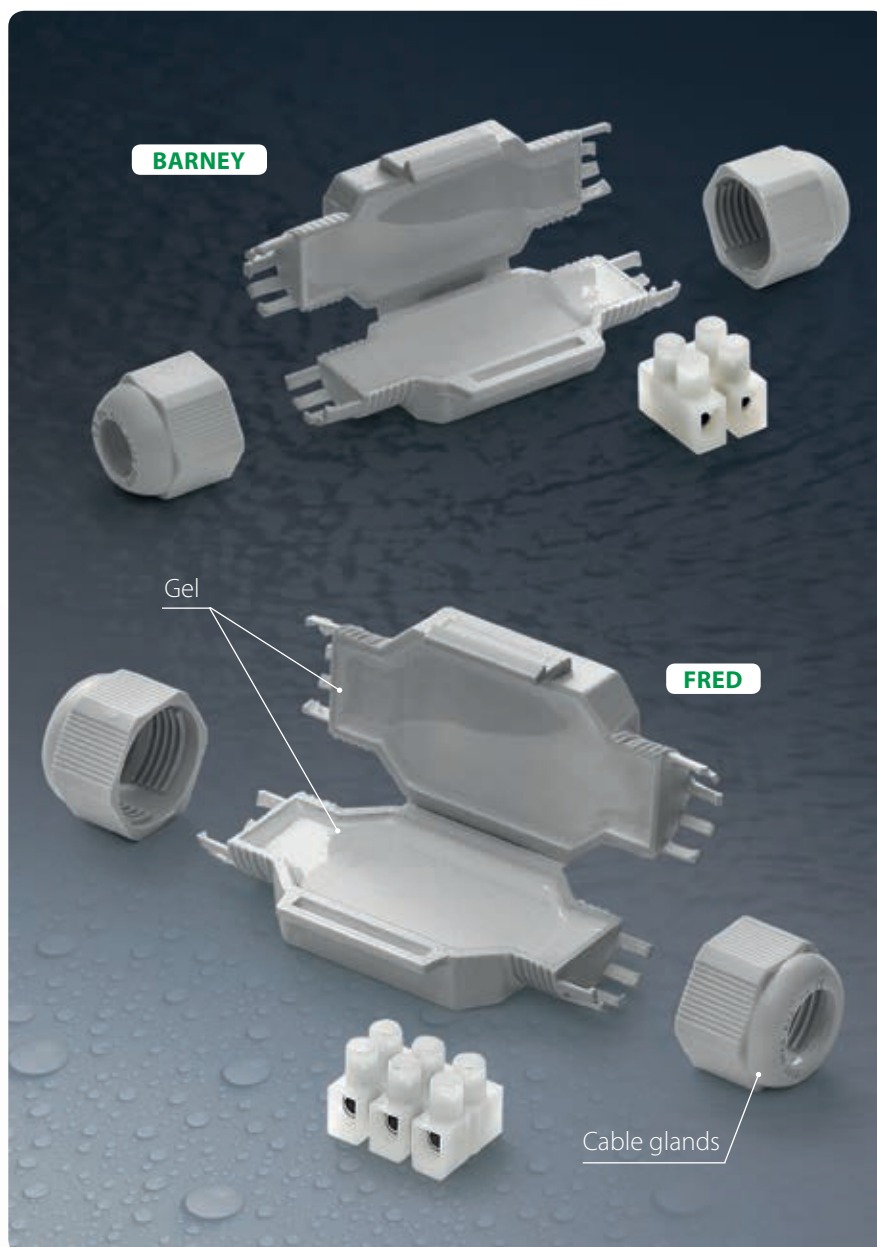
Fully submersible

Can be used underground

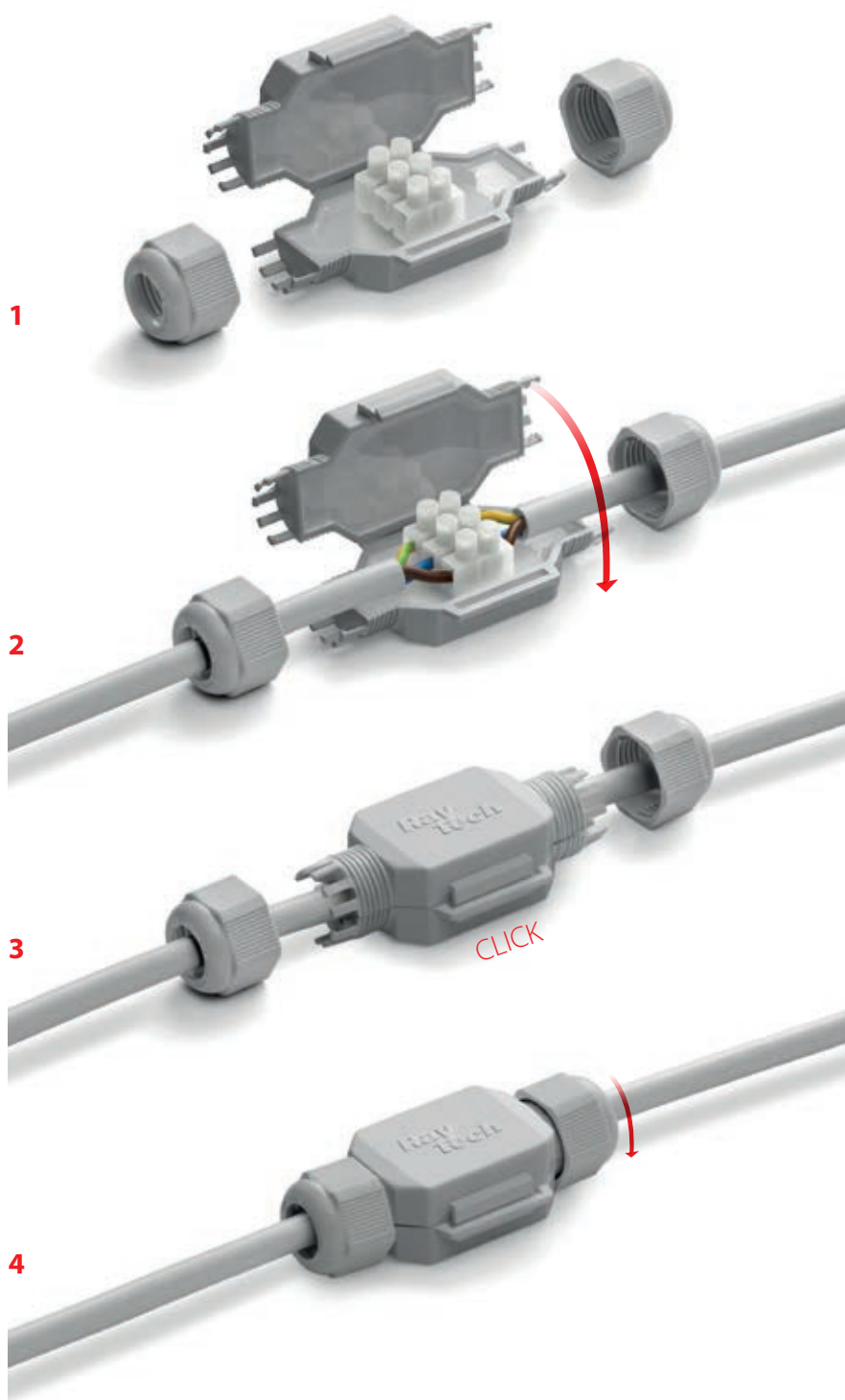
IP68
OFFICIALLY
TESTED

Little Joint

IP68, gel pre-filled micro joint, space-saver complete with connectors and with minimal aesthetic impact.








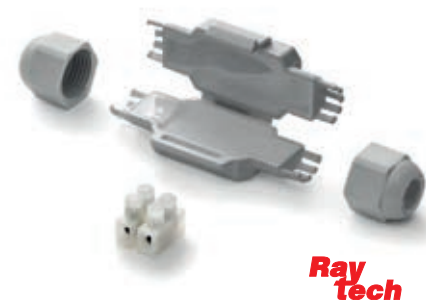
- Equipped with cable glands to avoid accidental cable traction
- Complete with screw connectors
- Pre-filled with non-toxic, non-classified gel
- Very compact and ready to use
- Always re-enterable
- Halogen free & UV resistant



For use in traps, in lampholders for LED spotlights, especially in the presence of water and moisture, thanks to its very small size.



Product	Mammut	Cable formation max (N° x mm ²)	Ø cables min - max (mm)	Pieces / Pack	 (mm)
Barney		2 x 2,5	6 - 10	1 pc / Blister	75 x 28 x 19
Barney MP		2 x 2,5	6 - 10	10 pc / Multipack	
Fred		3 x 2,5	8 - 13	1 pc / Blister	80 x 36 x 23
Fred MP		3 x 2,5	8 - 13	10 pc / Multipack	




**Ray
tech**




Gel Connection Accessories also suitable for continuous submersible use



IPX8
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TESTED | **IMQ**

Gel: UL 94-HB 

Operating
temperature 

Installation temperature:
-40°C / +50°C 

Fully submersible 

Can be used underground 

**Ray
Tech**

To choose the suitable accessory for your

			
GEL CONNECTION	Terminal blocks (chocolate block type)		End connectors/ terminal blocks
	2x	3x	3x
 HAPPY 0 41 x 28 x 19 mm	 2,5 mm²		
 HAPPY 1 45 x 37 x 24 mm	 2,5 mm²	 2,5 mm²	 2,5 mm²
 HAPPY 2 53 x 39 x 24 mm		 4 mm²	 4 mm²
 ISAAC 30 x 27 x 23 mm	 2,5 mm²		
 PASCAL 36 x 37 x 26 mm	 4 mm²	 4 mm²	 1,5 mm²
 WATT 30 x 42 x 26 mm			 2,5 mm²
 JOULE 33 x 52 x 26 mm			 4 mm²
 KELVIN 52 x 53 x 29 mm		 4 mm²	 4 mm²

application, begin with your preferred connector.

					
First generation of lever connectors (e.g. WAGO 222 or similar)			Flat lever connectors (e.g. WAGO 221 type or similar)		
2x	3x	5x	2x	3x	5x
					
 + 			 + 		
 +  + 	 + 		 +  + 	 + 	
					
 + 					
 + 			 + 		
 +  + 					

**Electrical performance:**

CEI EN 50393 as applicable
(with testing under water head and water
between the cable cores)

Gel: UL 94-HB

Halogen free:

according to CEI EN 50267 2-2

**Self-extinguishing and
resistant to abnormal
heat and fire:**

Glow wire test a +960°C
according to EN 60695-2-11

Operating
temperature **90°**

Gel operating temperature:
-60°C / +200°C

IP68
OFFICIALLY
TESTED

IMQ

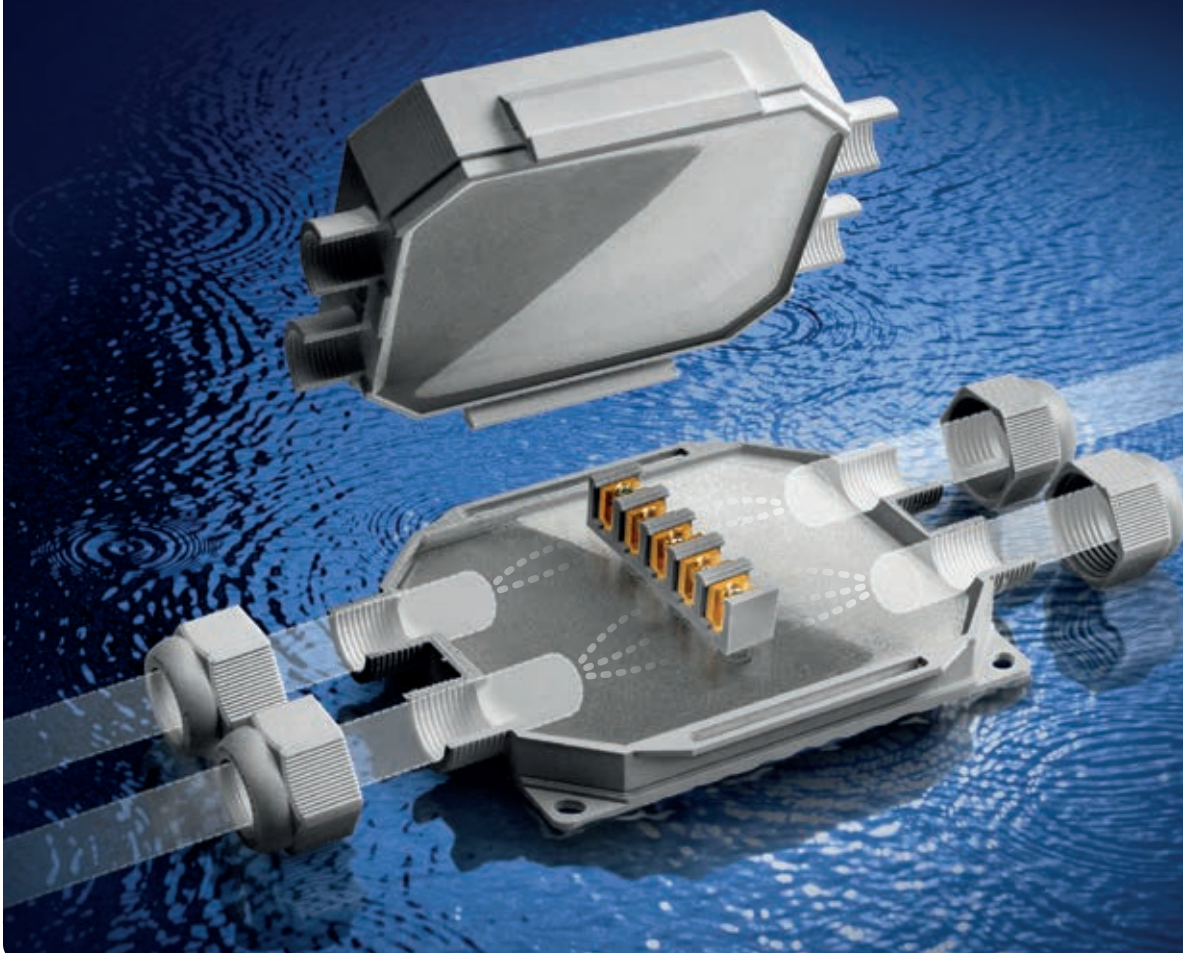
Ready Box IP68

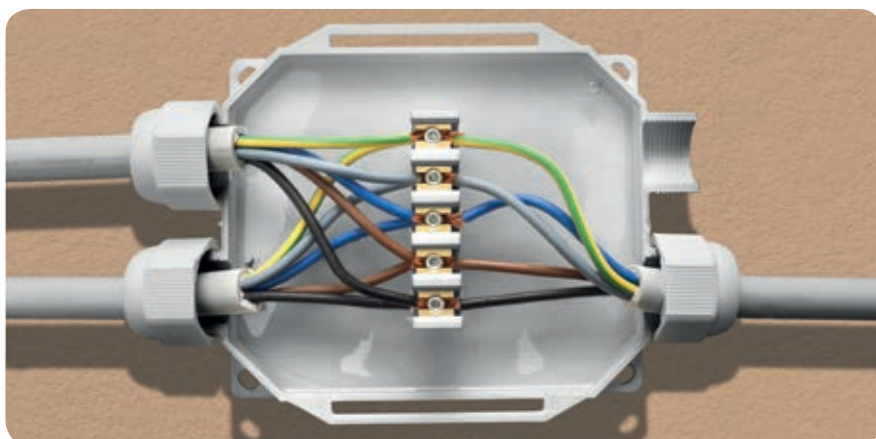
The 4-entrances, gel pre-filled junction box
complete with connection block and glands,
for 5 core cables with diameter up to 16 mm.

- Ready to use, it can be installed in all environmental conditions
- Also suitable for wet or flooded environments
- Always re-enterable
- Pre-filled with gel. Non-toxic and non-classified as hazardous under CLP
- Pre-threaded entries for cable gland mounting
- Snap shut closure, does not require screws
- Wall or external ceiling fixing system
- Halogen free & UV resistant
- No shelf life

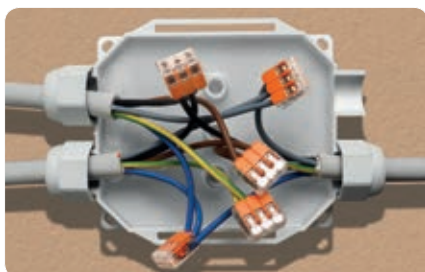
Ready, safe, quick & innovative

**Pre-filled with
non-toxic, safe gel.
Nothing to pour,
mix or cast!**





Thanks to its innovative design, unlike a standard box, there is no need to break through the walls of the box to insert the cable.



Also suitable for extra-flat lever connectors.



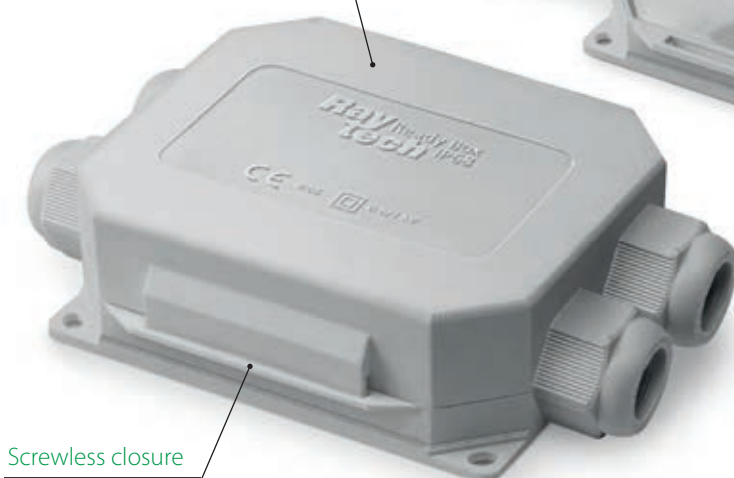
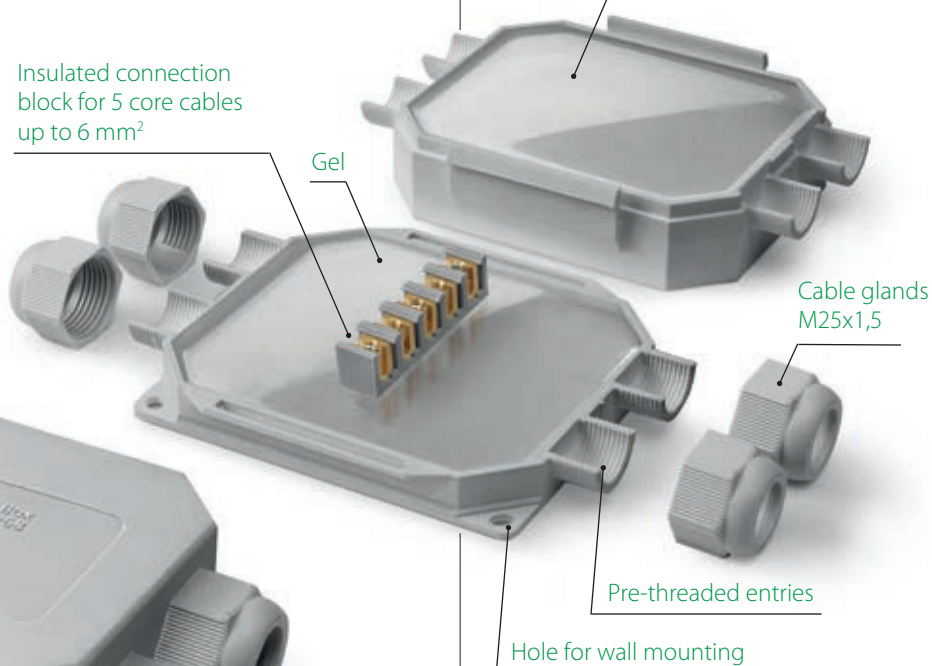
Also suitable for screw terminals.



Revolutionary!

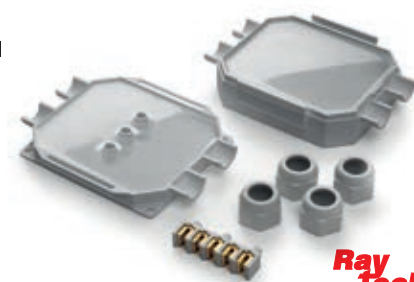
No additional accessories are required as it is equipped with a five-core connection block and 4 glands M25 x 1,5

Insulated connection block for 5 core cables up to 6 mm²



Screwless closure

Product	n° of entrances	Ø entrances with cable glands		 (mm)
		min (mm)	max (mm)	
Ready Box IP68	4	10	16	120 x 100 x 50



Raytech



JOINTS

PRE-FILLED WITH GEL
for integrated connections

**Ray
Tech New**



Electrical performance: CEI EN 50393
(with testing under water head
and water between the cable cores)
Class 2 in accordance with CEI 64-8.

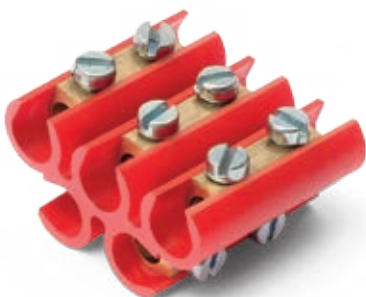
No flame propagation:
CEI 20-35 • IEC 60332-1 HD405-1
(as applicable)
Low smoke and toxic and
corrosive gas emissions

Gel: UL 94-HB
Mescola Involucro: UL 94-V2

Operating
temperature **90°**

Installation temperature: **-40°C / +50°C**

IPX8
OFFICIALLY
TESTED **IMQ**



Super Clik

Range of fast gel pre-filled straight or branch type joints for 0.6/1 kV multi core cables of up to 5 conductors.

The combination of the primary insulation in a cross-linked polymer gel and the highly robust insulating plastic case makes this a Class 2 joint defined by CEI 64-8. The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, it has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, they are chemically inert and therefore completely safe; the connections are re-entrable even after long working periods. Made of self-extinguishing components the joint is flame retardant. For cables at 90°C working temperature.

- Complete with isolated terminal blocks
- For straight and branch connections
- For all types of application, including submersible
- Re-accessible and with no shelf life
- Flame retardant
- Non toxic and safe



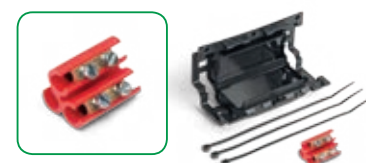
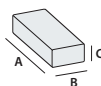
SUPERCLIK

JOINTS



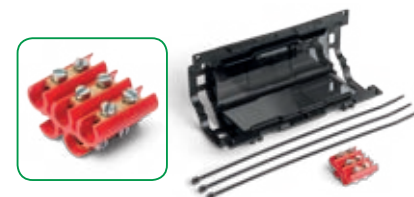
PRE-FILLED WITH GEL
for integrated connections

Product	Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)	A x B x C (mm)
	Straight Connections In line	Branch connections		
		T B		
Super Klik 0	3 x 1,5 - 6	3 x 1,5 - 4 3 x 1,5 - 2,5	14	95 x 43 x 28



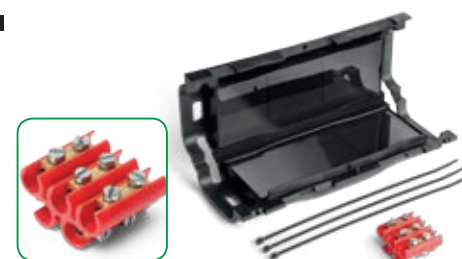
T: Through cable - B: Branch cable

Product	Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)	A x B x C (mm)
	Straight Connections In line	Branch connections		
		T B		
Super Klik 1	2 x 1,5 - 6	2 x 4 2 x 2,5	20,5	150 x 56 x 30
	3 x 1,5 - 6	3 x 4 3 x 2,5		
	4 x 1,5 - 6	4 x 4 4 x 2,5		
	5 x 1,5 - 6	5 x 4 5 x 2,5		



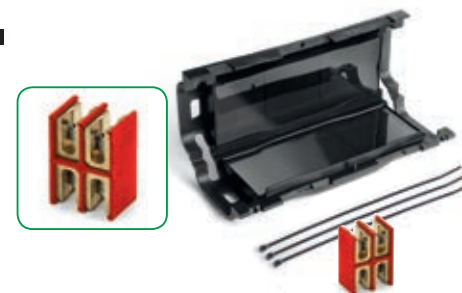
T: Through cable - B: Branch cable

Product	Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)	A x B x C (mm)
	Straight Connections In line	Branch connections		
		T B		
Super Klik 2	2 x 4 - 16	2 x 10 2 x 6	30	220 x 85 x 46
	3 x 4 - 16	3 x 10 3 x 6		
	4 x 4 - 16	4 x 10 4 x 6		
	5 x 4 - 16	5 x 10 5 x 6		

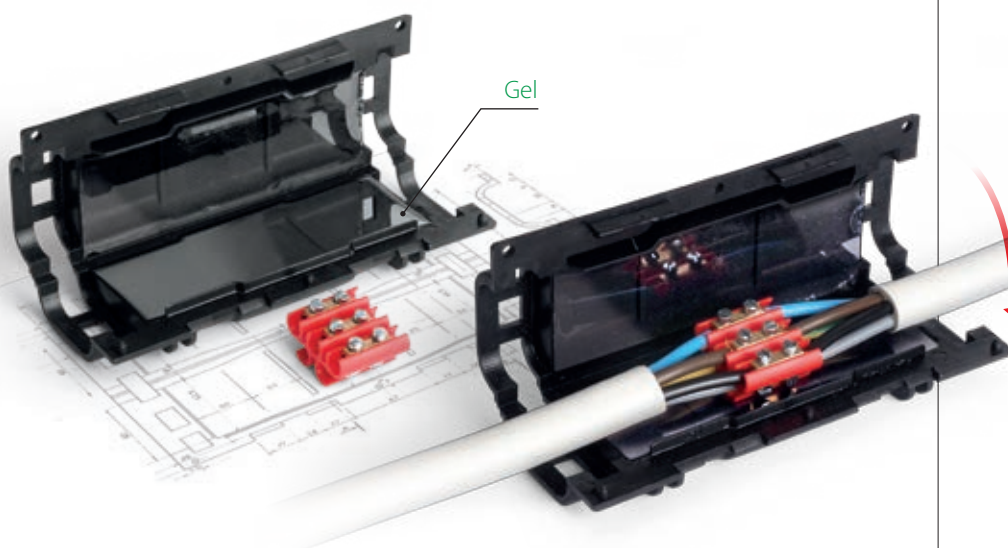


T: Through cable - B: Branch cable

Product	Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)	A x B x C (mm)
	Straight Connections In line	Branch connections		
		T B		
Super Klik 3	-	2 x 4 - 25 2 x 1,5 - 16	30	220 x 85 x 46
		3 x 4 - 25 3 x 1,5 - 16		
		4 x 4 - 25 4 x 1,5 - 16		



T: Through cable - B: Branch cable



**Ray
tech**



Electrical performance: CEI EN 50393
(with testing under water head
and water between the cable cores)
Class 2 in accordance with CEI 64-8.

No flame propagation:
CEI 20-35 • IEC 60332-1 • HD405-1
(as applicable)
Low smoke and toxic and corrosive
corrosive gas emissions

Gel:

Casing mix: UL 94-V2

Degree of protection: IP68

Operating
temperature

Installation temperature:
-40°C / +50°C

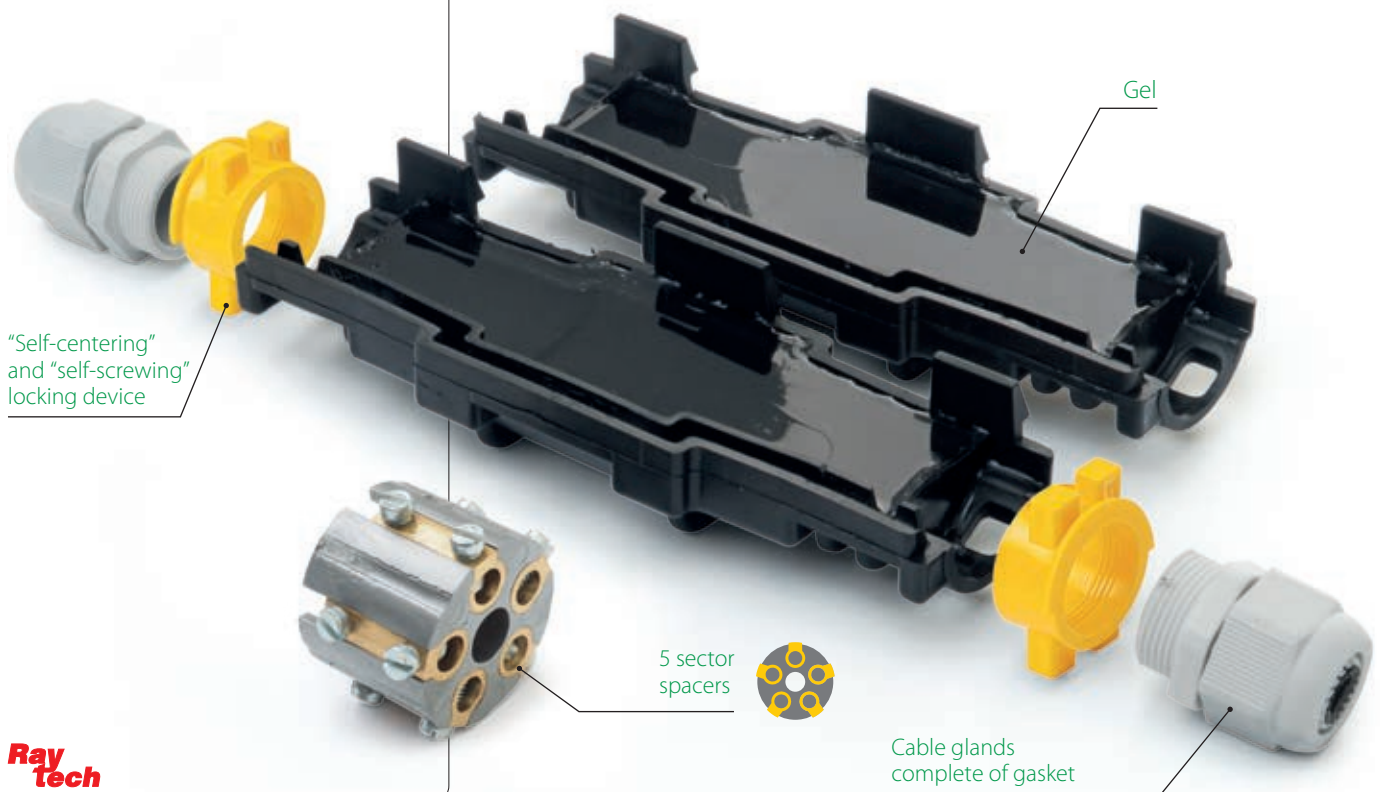
IP68
OFFICIALLY
TESTED | **IMQ**

Rapid Joint IP68

Radial closing gel pre-filled joint for extruded insulation cables up to 1 kV.

Primary insulation, consisting of a cross-linked polymer gel, and the exceptionally robust insulating plastic casing render Class 2 joints in accordance with the definitions contained in standard CEI 64-8. The joint has been tested in accordance with the main international specifications, with repeated flexing and torsion tests and immersion in water, and has been declared as conforming to the mechanical, electrical and sealing specifications required for plastic cable accessories. The joint and its components have an unlimited shelf life, are chemically inert and therefore completely safe. Conductor connections are re-enterable even after long periods of operation. Packaged with self-extinguishing material, flame retardant, for cables at 90°C working temperature. The radial closing system facilitates joint application, making them re-enterable only by means of a tool.

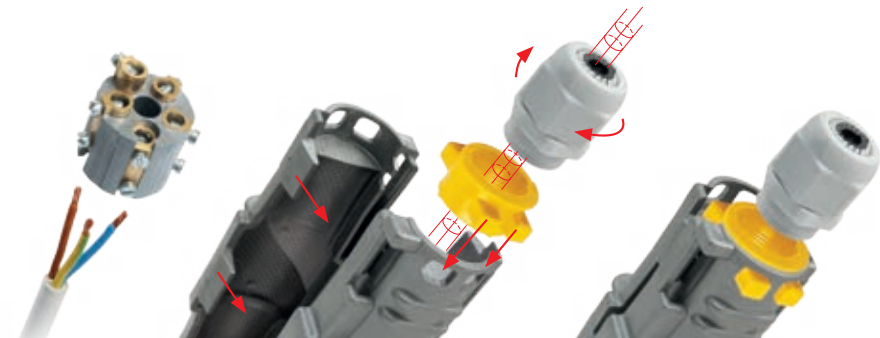
- For straight connections (in line)
- For multi core cables of up to 5 cores
- With suitable spacers
- For all types of application, including submersible
- Wide range of cable formations
- Re-enterable only by means of a tool
- Suitable for 3 core crossing
- Non-toxic, with no expiry date





Product	Formation n°	Configuration IP68			Configuration IPX8		
		Section (mm ²)	Ø cable (mm)	A x B (mm)	Section (mm ²)	Ø cable (mm)	A x B (mm)
Rapid Joint L1,5-IP68	●	4 - 25			1,5 - 50		
	●●	1,5 - 6			1,5 - 6		
	●●●	1,5 - 2,5	8 - 13	155 x 55	1,5 - 6	20,5	105 x 55
	●●●●	1,5			1,5 - 6		
	●●●●●	1,5			1,5 - 6		
Rapid Joint L6-IP68	●	25 - 70			2,5 - 150		
	●●	1,5 - 10			2,5 - 10		
	●●●	1,5 - 6	12 - 18	245 x 60	2,5 - 10	24	180 x 60
	●●●●	1,5 - 6			2,5 - 10		
	●●●●●	1,5 - 6			2,5 - 10		
Rapid Joint L10-IP68	●	70 - 95			120 - 240		
	●●	10 - 16			4 - 25		
	●●●	6 - 10	16 - 20	275 x 65	4 - 25	31	210 x 65
	●●●●	4 - 10			4 - 25		
	●●●●●	4 - 10			4 - 25		
Rapid Joint L25-IP68	●	120 - 240			120 - 240		
	●●	25			10 - 50		
	●●●	16 - 25	21 - 28	410 x 100	10 - 50	31	320 x 100
	●●●●				10 - 50		
	●●●●●	16 - 25			10 - 50		

For single core cable: do not install the separator with screw connectors and connect with crimp connector.



IP68

- Protection from the ingress of powders, objects up to 1 mm diameter.
- Permanent water immersion.

IPX8

- Permanent water immersion.



New

New terminal for Rapid Joint L-IP68 with shear bolt connectors.



New



Electrical performance:

CEI EN 50393
(with testing under water head
and water between the cable cores)
Class 2 in accordance with CEI 64-8.


No flame propagation:

CEI 20-35 • IEC 60332-1 HD405-1
(as applicable)
Low smoke and toxic and
corrosive gas emissions

Gel:  US

Casing mix: UL 94-V2

Degree of protection: IPX8

Operating temperature 

Installation temperature: 
-40°C / +50°C

IPX8
OFFICIALLY
TESTED

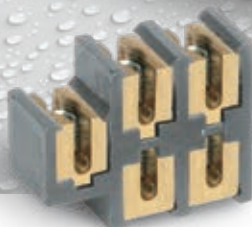
IMQ

King Joint

Range of fast gel pre-filled straight or branch type joints for 0.6/1 kV multi core cables of up to 5 conductors.

The primary insulation, consisting of a cross-linked polymer gel and extremely strong plastic insulating housing, make the Class 2, in accordance with the definitions contained in CEI Regulation 64-8. The joint, tested in accordance with the most important international specifications with repeated bending and twisting cycles and immersion in water, was found to comply with the mechanical, electrical and sealing requirements necessary for accessories for plastic cables. The joint and its components have no self life, are chemically inert and therefore completely safe; the conductor connections are re-accessible even after long operating periods. Packaged with self-extinguishing material, it is flame retardant. Suitable for cables with a temperature of +90°C.

- For multicore cables of up to 5 cores
- 5 sector spacers for proper centring of five-core connection
- Complete with screw connectors
- For straight and branch connections, including armoured cable
- For all types of application, including submersible
- Re-accessible and with no shelf life
- Flame retardant
- Non toxic and safe

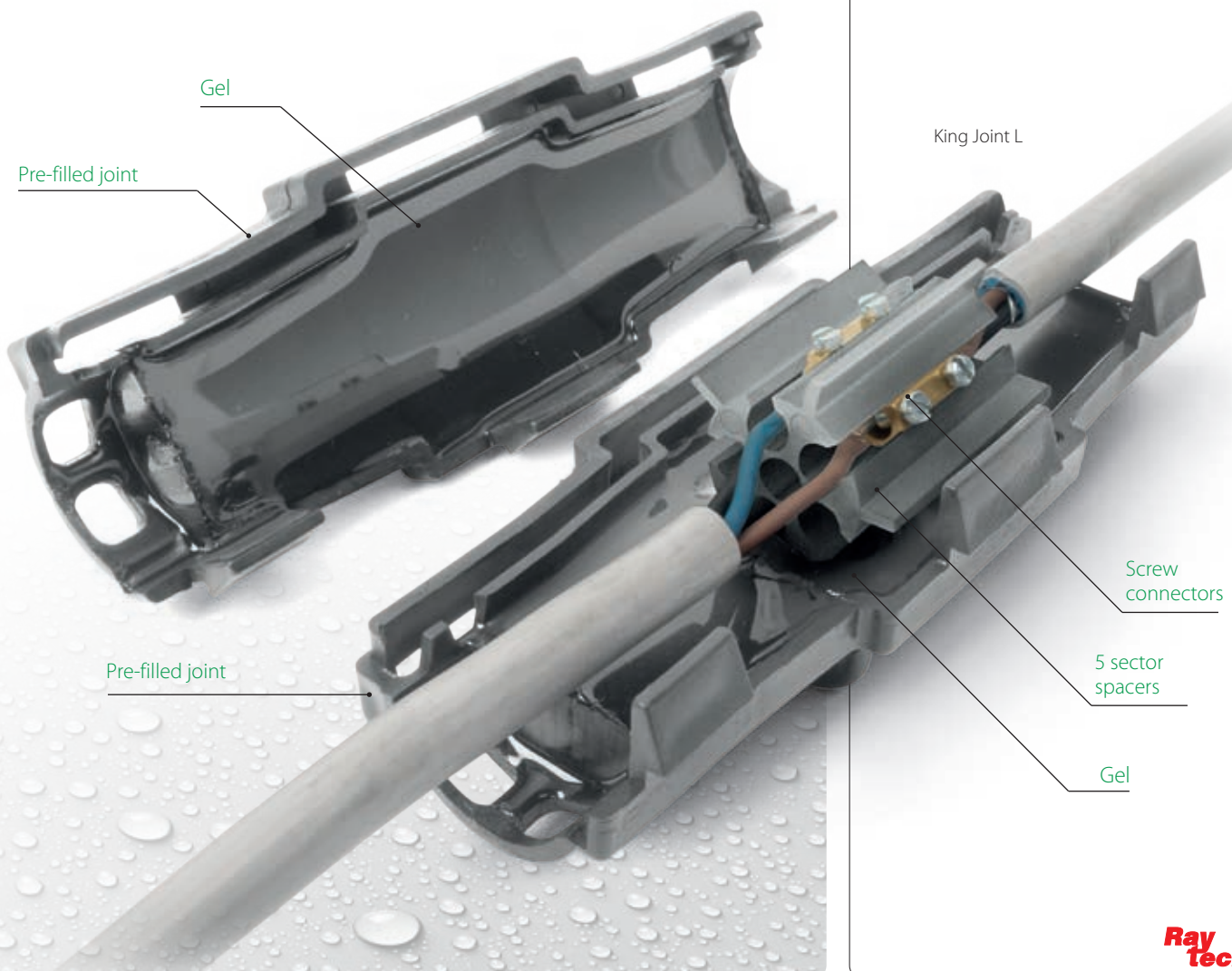
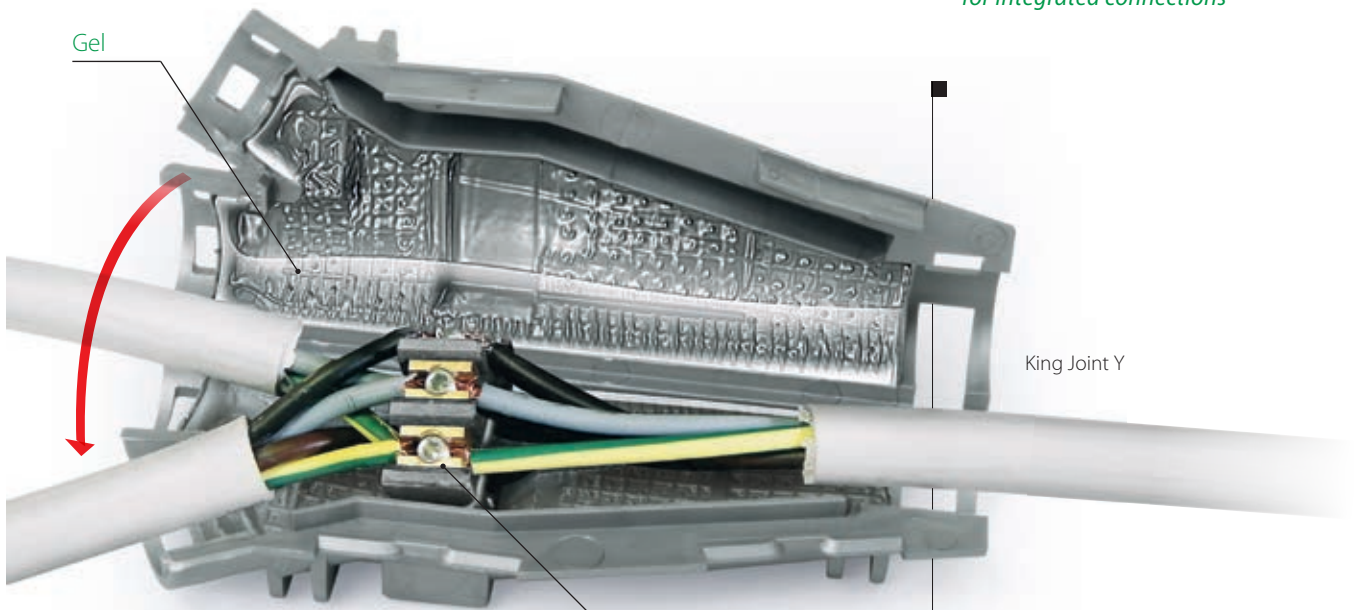


JOINTS



PRE-FILLED WITH GEL

for integrated connections



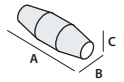


JOINTS

PRE-FILLED WITH GEL
for integrated connections

King Joint L

Straight joints, including armoured cable.



Product	LINE CONNECTIONS	Ø max cables (mm)	Dimensions A x B x C (mm)
	Cable formation and conductor cross sections (n° x mm²)		
• King Joint 0 blister	2 x 1,5 - 6	20,5	105 x 55 x 55
	3 x 1,5 - 6		
	4 x 1,5 - 6		
	5 x 1,5 - 6		
• King Joint L6 box	2 x 1,5 - 6	20,5	105 x 55 x 55
	3 x 1,5 - 6		
	4 x 1,5 - 6		
	5 x 1,5 - 6		



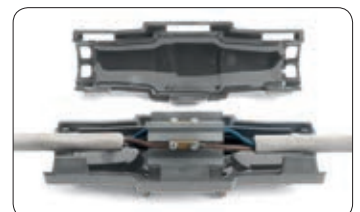
Product	STRAIGHT CONNECTIONS	Ø max cables (mm)	Dimensions A x B x C (mm)
	Cable formation and conductor cross sections (n° x mm²)		
• King Joint L10 • King Joint L10 - ARM	2 x 2,5 - 10	24	180 x 60 x 60
	3 x 2,5 - 10		
	4 x 2,5 - 10		
	5 x 2,5 - 10		



Product	STRAIGHT CONNECTIONS	Ø max cables (mm)	Dimensions A x B x C (mm)
	Cable formation and conductor cross sections (n° x mm²)		
• King Joint L25 • King Joint L25 - ARM	2 x 4 - 25	31	210 x 65 x 65
	3 x 4 - 25		
	4 x 4 - 25		
	5 x 4 - 25		

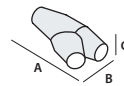
ARM type joints complete with continuity device
suitable for connection to **armoured wire or steel tape cables**.

Installation sequence King Joint L



King Joint Y

Branch joints, including armoured cable.



Product	BRANCH CONNECTIONS Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)		Dimensions A x B x C (mm)
	T	B	T	B	
	2 x 1,5 - 6 3 x 1,5 - 6 4 x 1,5 - 6 5 x 1,5 - 6	2 x 1,5 - 4 3 x 1,5 - 4 4 x 1,5 - 4 5 x 1,5 - 4	22,5	18,5	

T : Through cable - B : Branch cable



Product	BRANCH CONNECTIONS Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)		Dimensions A x B x C (mm)
	T	B	T	B	
	2 x 4 - 16 3 x 4 - 16 4 x 4 - 16* 5 x 4 - 16*	2 x 1,5 - 4 3 x 1,5 - 4 4 x 1,5 - 4 5 x 1,5 - 4	26	18,5	

T : Through cable - B : Branch cable

* For armoured cables max conductor cross section 10 mm².



Product	BRANCH CONNECTIONS Cable formation and conductor cross sections (n° x mm²)		Ø max cables (mm)		Dimensions A x B x C (mm)
	T	B	T	B	
	2 x 10 - 35 3 x 10 - 35 4 x 10 - 35*	2 x 1,5 - 6 3 x 1,5 - 6 4 x 1,5 - 6	36	26	

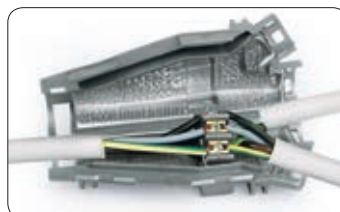
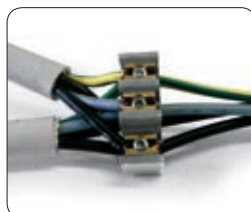
T : Through cable - B : Branch cable

* For armoured cables max conductor cross section 25 mm².

ARM type joints complete with continuity device
suitable for connection to **armoured wire or steel tape cables**.



Installation sequence King Joint Y

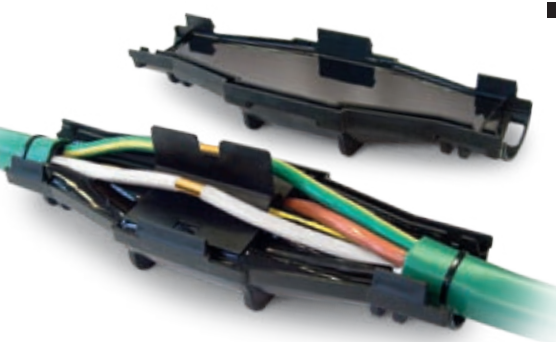




JOINTS

PRE-FILLED WITH GEL

for free connections



Electrical performance:
CEI EN 50393 with connectors
complying with EN 61238-1
(with testing under water head
and water between the cable cores)
Class 2 in accordance with CEI 64-8.

Rapid Joint

IPX8 straight joints for 0,6/1 kV extruded cable.



For COPPER cables	Cable formation and conductor cross sections (n° x mm²)				With optical fibre separator 4x	Dimensions A x B (mm)
Product	1x	2x	3x	4x		
Rapid Joint L6	1,5 - 50	1,5 - 10	1,5 - 10	1,5 - 6	-	105 x 55
Rapid Joint L10	2,5 - 150	2,5 - 25	2,5 - 16	2,5 - 16	-	180 x 60
Rapid Joint L25	120 - 240	6 - 50	6 - 35	4 - 35	-	210 x 65
Rapid Joint L95	185 - 400	35 - 95	25 - 70	25 - 70	16 - 50	320 x 100
For ALUMINIUM cables	1x	2x	3x	4x	4x	(mm)
Rapid Joint L 25	120 - 240	16 - 35	10 - 25	10 - 25	-	210 x 65
Rapid Joint L 95	185 - 400	35 - 95	25 - 70	25 - 70	16 - 50	320 x 100

For screened or tape or wire armoured cables



Joint supplied with armour continuity device

Rapid Joint S/ARM



For copper wire SCREENED cables	Cable formation and conductor cross sections (n° x mm²)				With optical fibre separator 4x	Dimensions A x B (mm)
Product	1x	2x	3x	4x		
Rapid Joint L 10-S	2,5 - 120	2,5 - 10	2,5 - 10	2,5 - 10	-	180 x 60
Rapid Joint L 25-S	120 - 185	16 - 25	10 - 25	10 - 25	-	210 x 65
Rapid Joint L 95-S	240 - 400	35 - 95	25 - 70	25 - 70	16 - 50	320 x 100
For copper tape ARMoured cables	2x	3x	4x	4x		(mm)
Rapid Joint L 10-ARM	2,5 - 10	2,5 - 10	2,5 - 10	-	-	180 x 60
Rapid Joint L 25-ARM	16 - 25	10 - 25	10 - 25	-	-	210 x 65
Rapid Joint L 95-ARM	35 - 95	25 - 70	25 - 70	16 - 50	-	320 x 100

For signalling and control cables



Rapid Joint LS



Product	Conductor sections cross (mm²)	Cable formation (n° conductors)										Dimensions A x B (mm)
		5x	7x	10x	12x	16x	19x	24x	40x	75x	100x	
Rapid Joint-LS1	1,5 2,5	•	•	•	•	•	•					180 x 60
Rapid Joint-LS2	1,5 2,5					•	•	•	•			210 x 65
Rapid Joint-LS3	1,5 2,5						•	•	•	•	•	320 x 100

Straight joints for telephone cables



Rapid Joint T



UNScreened	SCREENED	N° pairs for conductor cross sections (n° x mm²)	Dimensions A x B (mm)
Product	Product		
Rapid Joint-T26	Rapid Joint-TS26	(1 - 26) x (0,5 - 0,6)	180 x 60
Rapid Joint-T61	Rapid Joint-TS61	(30 + 1 - 64 + 1) x (0,5 - 0,6)	210 x 65
Rapid Joint-T101	Rapid Joint-TS101	(60 + 1 - 100 + 1) x (0,5 - 0,6)	320 x 100

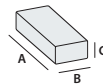
Click Fire

Straight or branch joint pre-filled with gel, for multi core cables up to 4 cores.



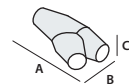
Straight or branch multi core joints for 0.6/1 kV extruded cables.

Product	Cable formation and conductor cross sections (n° x mm ²)		Ø max cables (mm)		Dimensions A x B x C (mm)
	Through or straight	1 or 2 branch cables	Through or straight	Branch	
CLIK 0 Fire	1 x 2,5 - 50 2 x 2,5 - 6	1 x 1,5 - 10 2 x 1,5	16	10	95 x 43 x 28
CLIK 1 Fire	1 x 6 - 95 2 x 1,5 - 16 3 x 1,5 - 10 4 x 1,5 - 10	1 x 1,5 - 35 2 x 1,5 - 6 3 x 1,5 - 6 4 x 1,5 - 4	20,5	15	150 x 56 x 30
CLIK 2 Fire	1 x 50 - 185 2 x 10 - 35 3 x 6 - 35 4 x 6 - 35	1 x 16 - 185 2 x 1,5 - 35 3 x 1,5 - 35 4 x 1,5 - 16	30	29	220 x 85 x 46



Branch joints with 30° output for 0.6/1 kV extruded cables.

Product	Through Branch		Through Branch		(mm)
	Through	Branch	Through	Branch	
CLIK 2000 Fire	1 x 2,5 - 25	1 x 1,5 - 16	14	12,5	75 x 40 x 21
CLIK 2001 Fire	1 x 6 - 95 2 x 1,5 - 16 3 x 2,5 - 16 4 x 2,5 - 10	1 x 1,5 - 70 2 x 1,5 - 10 3 x 1,5 - 10 4 x 1,5 - 6	22,5	18,5	138 x 60 x 37
CLIK 2002 Fire	1 x 50 - 150 2 x 1,5 - 25 3 x 4 - 25 4 x 4 - 16	1 x 1,5 - 70 2 x 1,5 - 10 3 x 1,5 - 10 4 x 1,5 - 6	26	18,5	194 x 74 x 43
CLIK 2003 Fire	1 x 150 - 240 2 x 16 - 50 3 x 16 - 50 4 x 16 - 50	1 x 50 - 120 2 x 10 - 25 3 x 10 - 25 4 x 6 - 16	36	26	290 x 105 x 51



Electrical performance:

CEI EN 50393 with connectors complying with EN 61238-1 (with testing under water head and water between the cable cores) Class 2 in accordance with CEI 64-8.

No flame propagation:

CEI 20-35 • IEC 60332-1 • HD405-1 (as applicable)

Gel: **US**

Casing mix: UL 94-V2

Degree of protection: IPX8

90° Operating temperature

Installation temperature: -40°C / +50°C



RINA

Sections evaluated on the base extruded 0,6 1 kV cable.

Raytech



Magic Power Gel

The unique bi-component gel in a single bottle, with superior dielectric, sealing and thermal characteristics, re-enterable and re-usable!

- Very sticky
- Strong self amalgamating characteristics
- Single compact bottle; convenient twin compartment
- Re-usable as well as re-enterable, even after long working periods
- It doesn't give any waste
- Non toxic and safe

INSULATING and SEALING GEL



RE-ENTERABLE



RE-USABLE





Stickiness

- Exceptional sealing properties in any condition
- Better resistance to pressure
- Effective even in vertical or ceiling applications

Self-agglomerating

- Once cross linked it perfectly adheres on itself characteristics to get an homogeneous and compact mass
- It can be therefore applied in multiple layers

Zero waste

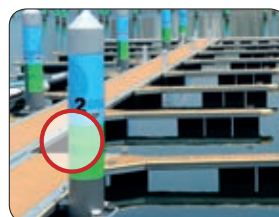
- Due to the nature of the product waste is eliminated; even residual product can be saved and used for the next application
- Also any left over product maintains it's high performance characteristics

Single bottle

- Highly useful
- The most compact packaging
- Less space occupied in the toolbox
- Both components in the same packaging

Magic Power Gel

Product	Colour	Package type	Quantity
Magic Power Gel	●	1 single, bi-component bottle 1 small basin - 1 mixing spoon	1000 ml
Magic Power Gel 500	●	1 single, bi-component bottle 1 small basin - 1 mixing spoon	500 ml
Magic Power Gel 250	●	1 single, bi-component bottle	250 ml



For all types of connections, even in the toughest conditions, for power, telecom and signalling!

Gel: UL 94-HB

Dielectric strength:

>23 kV/mm

Cross linking time:

fast (about 15 min. at 25°C)

Volume resistivity:

>2 . 10¹⁵ Ω cm

Operating temperature:

-60°C / +200°C

Overload temperature

for short periods:

uo to 250°C

Stabilised for:

mould - UV

Degree of protection:

IP68 (in proper casings)

IP68 | **IMQ**
OFFICIALLY TESTED



**Ray
tech**



Gel:

Dielectric strength:
>23 kV/mm

Cross linking time:
fast (about 10 min. at 23°C)

Volume resistivity:
 $>2 \cdot 10^{15} \Omega \text{ cm}$
Working temperature:
-60°C / +200°C

Overload temperature for short periods:
up to 250°C

Stabilised for:
mould - UV

Degree of protection:
IP68 (in proper casings)

IP68
OFFICIALLY TESTED

IMQ

Magic Gel & Magic Fluid

Bicomponent gel with very high dielectric and thermal characteristics, ideal for connection systems (joint shells or enclosures) for power cables.

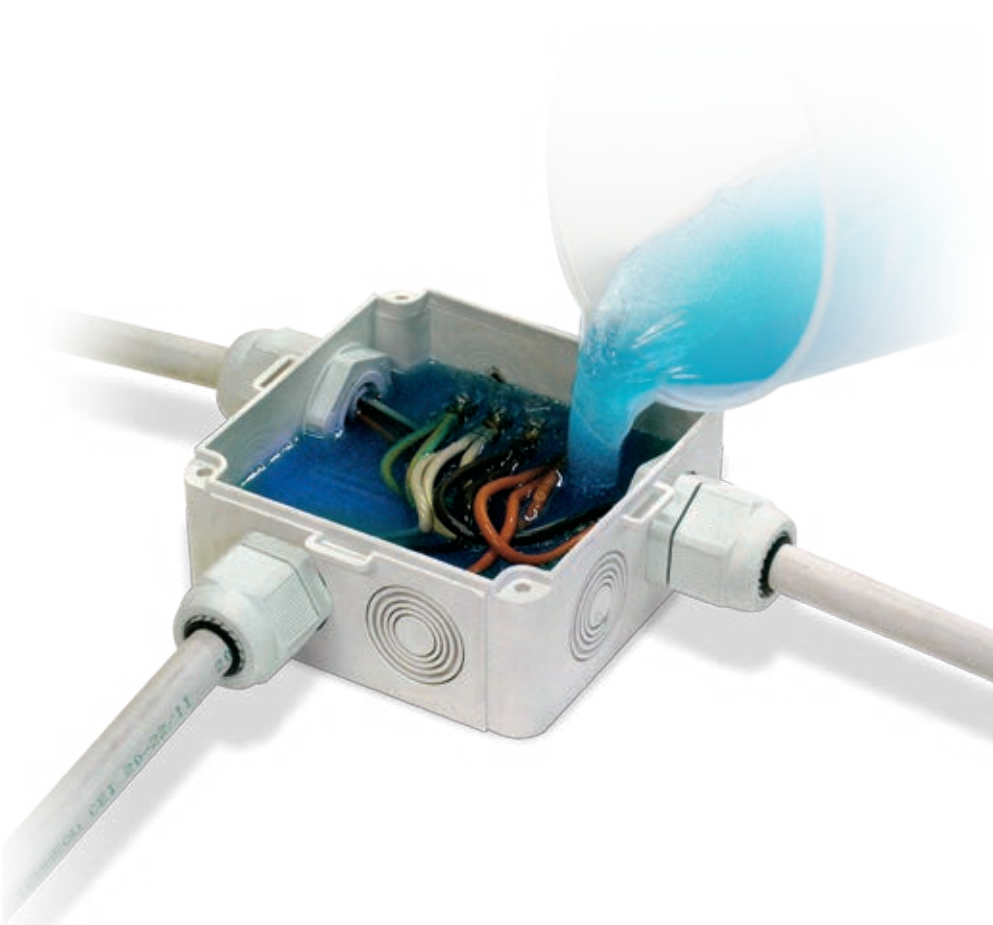
The insulating and sealing gel, when cast in suitable casings, ensures an IP68 degree of protection and it is able to replace all types of resins. This is a self-polymer insulation in two practical bottles or in a single use bag, with cold cross linking. Once poured, the insulation, characterized by very low viscosity, surrounds and envelopes any type of material, cross linking in less than 10 minutes. Completely non-toxic, cross linking with a very slow isothermal peak that does not thermally stress the materials it comes into contact with.

- For high temperature applications!
- Quick cross linking (only 10 minutes)
- Re-enterable also after long working periods
- Non-toxic and safe with no shelf life
- Low viscosity



Examples of use





Problem ENERGY

What does a gel for this type of system have to give?

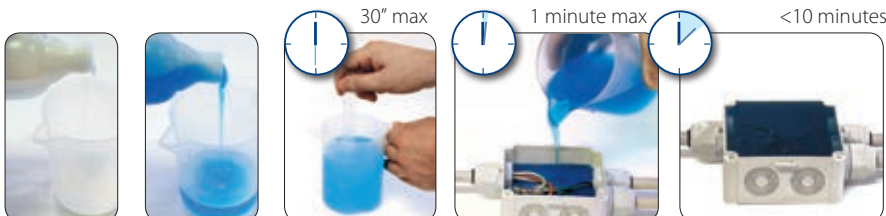
- ✓ **INSULATION:** Elevated voltages (1 kV operating, 4 kV testing)
- ✓ **THERMAL PERFORMANCE:** Operating temperature 90°C, overload temperature 130°C, short circuit temperature 250°C
- ✓ **SEALING:** Installations also possible in humid environments, flooded wells
- ✓ **DEGREE OF PROTECTION:** Must also work with water between the cores of the cable
- ✓ **CERTIFIED SYSTEMS:** The combination of insulation gel + casing must comply with current standards CEI 20-33 and EN 50393

Solution: *Magic Gel* meets all your Energy system requirements!



Magic Gel

Product	Colour	Package type	Total quantity
Magic Gel 300	●	2 bottles	300 ml
Magic Gel 1000	●	2 bottles - 1 small basin - 1 mixing spoon	1000 ml
Magic Gel 2000	●	2 bottles - 1 small basin - 1 mixing spoon	2000 ml
Magic Gel 10000	●	2 tanks - 1 small basin - 1 mixing spoon	10 lt



Magic Fluid

Product	Colour	Package type	Total quantity
Magic Fluid 90	●	Bicomponent single dose bags	90 gr
Magic Fluid 110	●	Bicomponent single dose bags	110 gr
Magic Fluid 170	●	Bicomponent single dose bags	170 gr
Magic Fluid 210	●	Bicomponent single dose bags	210 gr
Magic Fluid 420	●	Bicomponent single dose bags	420 gr
Magic Fluid 550	●	Bicomponent single dose bags	550 gr






IP68
OFFICIALLY
TESTED | **IMQ**
(in proper casings)

Wonder Gel

Single component insulating gels in cartridge to instantly protect new installations and oversee maintenance of all types of electrical connections.

Installer's best friends. Electrical connections, within empty enclosures, are exposed to the risk of short circuit, oxidation and corrosion, at times, resulting in irreparable damages. Without stress and no waiting around, **WonderGel** and **WonderGel Invisible** make your job easier, guaranteeing the protection and safety of systems in compliance to best practice rules to provide the highest quality solution, quick and perfect to get the satisfaction of both you and your clients.

- Ready to use! No mixing required!
Already cross-linked! No need to wait!
- Resolve issues connected to incorrect insulation or sealing
- Eliminate annoying out of service instances caused by moisture
- Protect your systems from the penetration of insects
- Protect your electrical connections from oxidation and corrosion
- Italian Utility Model 

VIDEO SURVEILLANCE
SYSTEMS



CONNECTIONS IN MOIST
ENVIRONMENTS



UNDERGROUND CONNECTIONS

***Time and
space-saver***

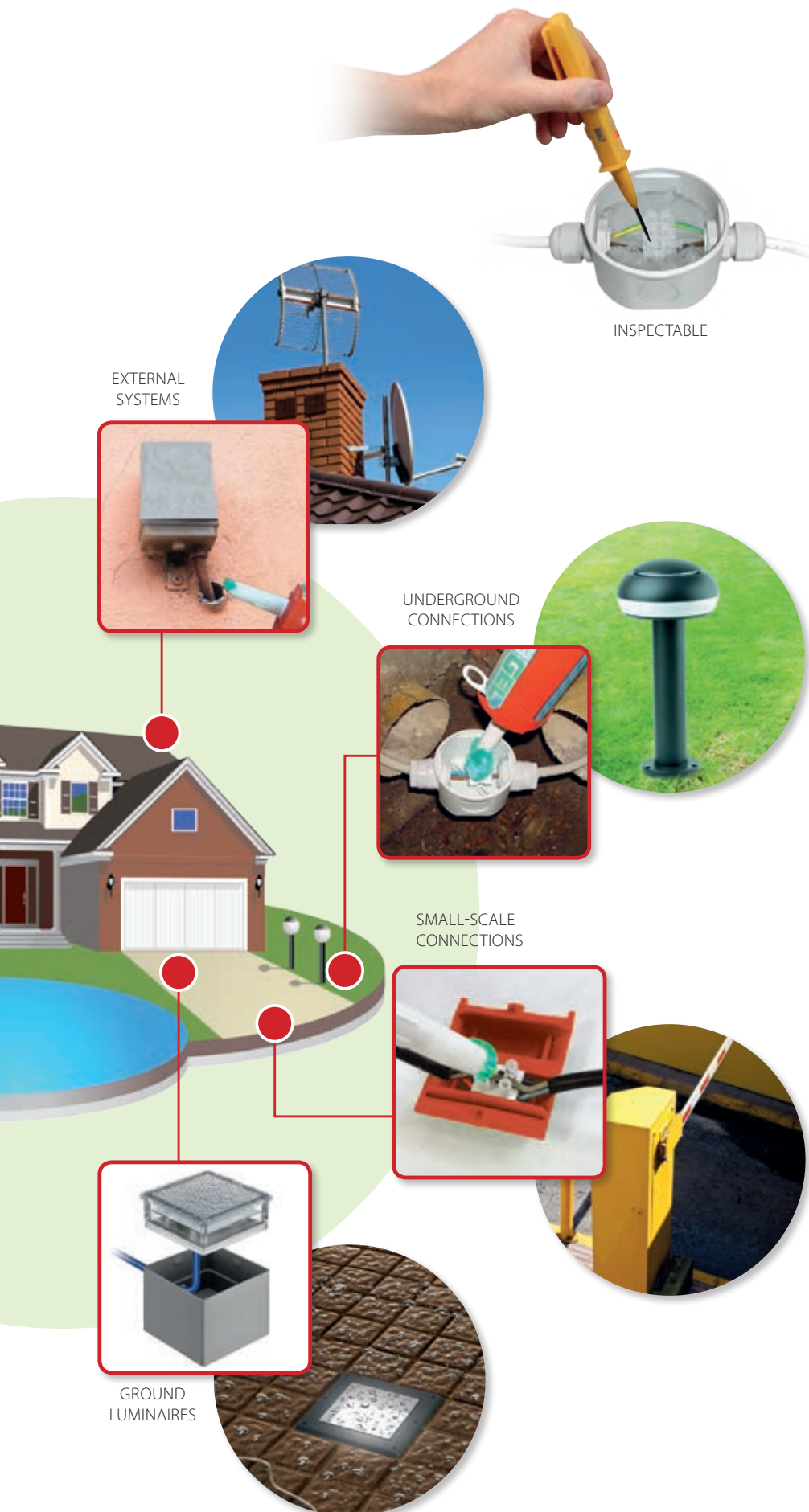
**EASY TO APPLY EVEN
IN AREAS WHICH ARE
DIFFICULT TO ACCESS!**

Wonder Gel

Product	Colour	Package type	Total quantity
Wonder Gel	●	Cartridge with measuring nozzle	280 ml
Wonder Gel Invisible	○	Cartridge with measuring nozzle	280 ml



***Always at your
fingertips!***



WHAT IS GEL WONDER?

- A single component gel
- Extremely sticky
- Stays soft with time
- Never dries
- Non-toxic and safe
- No shelf life



WHAT DOES GUARANTEE?

- Maximum insulation and sealing
- Effective and stable adhesion with the passing of time
- High resistance to water pressure
- Degree of protection IP68 when dispensed in suitable casings



WHY IS IT IN A CARTRIDGE?

- Always ready to use and at your fingertips
- Can be used with standard guns
- It is measurable
- No waste
- Complete with nozzle
- Extremely rapid to use even in difficult positions
- Compact



Raytech

Techno Gel Gum

Dielectric strength:
 $\geq 21 \text{ kV/mm}$
Cross linking time:
 fast (about 10 min. at 25°C)
Volume resistivity:
 $> 2 \times 10^{14} \Omega \text{ cm}$
Operating temperature:
 $-60^\circ\text{C} / +200^\circ\text{C}$
Overload temperature
for short periods:
 up to 250°C
Stabilised for:
 mould-UV
Degree of protection:
 IP68 (in proper casings)

IP68
 OFFICIALLY
 TESTED | **IMQ**

Single bottle two-component insulation with very high dielectric, thermal and sealing characteristics. Waterproof and re-enterable!

TechnoGelGum is a strong hold flexible elastomer whose formula has been optimised for the protection of POWER CABLE, TELECOM CABLE and ELECTRONIC CIRCUIT connections. A new recipe that gives the product a surprising, original texture that combines the characteristics of GEL and RUBBER to emphasise its features. It's elastic and flexible like gel, but also tough and dry like rubber.

- For installations up to 1 kV
- Suitable for high temperatures
- Even suitable for high depths under water
- Waterproof $> 1 \text{ MPa}$
- UV resistant
- Removable
- Vibration resistant
can act as a damper
- Suitable for installation in
salt water (sea) and in
chlorinated water (pools)
- Non toxic and safe


**EXTREMELY FLEXIBLE
AND WATER-REPELLENT**


**NEW EXCEPTIONALLY
STRONG CONSISTENCY**

TECHNO
GELGUM

FLEXIBLE LIKE GEL

STRONG LIKE RUBBER

**BORN TO BE
UNIQUE**

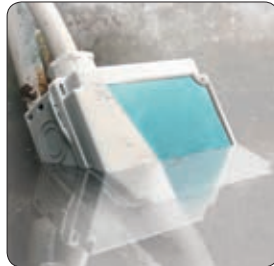
**Ray
Tech**



Not quite a GEL and not quite RUBBER,
BUT HAS THE BEST FEATURES OF BOTH!



SAFE



WATERPROOF



RE-ENTERABLE

Product	Colour	Package type	Quantity
Techno Gel Gum		1 single, bi-component bottle 1 small basin - 1 mixing spoon	1 kg
Techno Gel Gum 500		1 single, bi-component bottle 1 small basin - 1 mixing spoon	500 gr

Installation sequence



Shake before using.



Pour TechnoGelGum into the provided beaker in a 1:1 ratio.



Mix for 1 min. max.



Pour within 1 min. max.



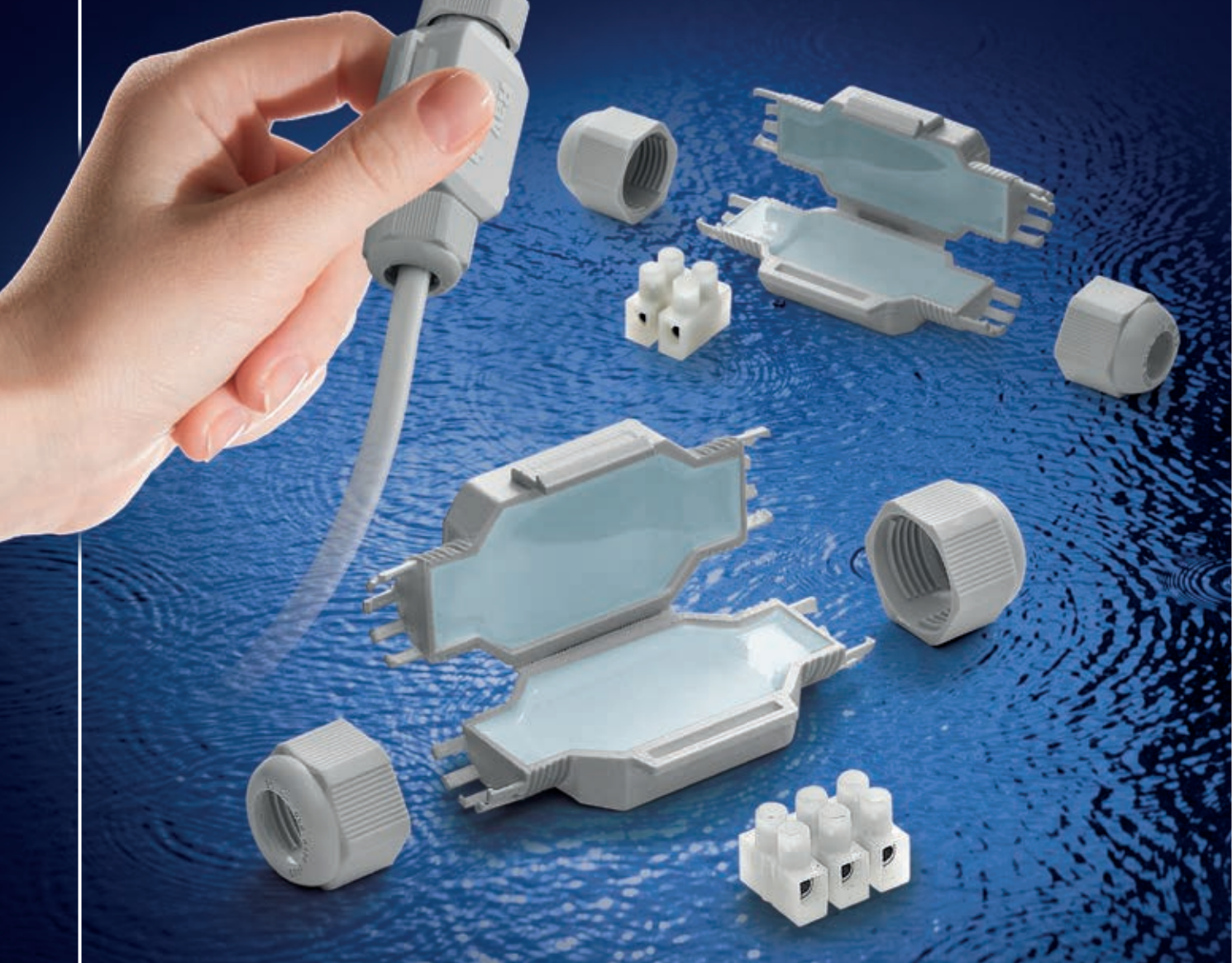
In just 10 minutes the curing is completed.



**Ray
tech**

LittleJoint

Revolutionary Boxes



Ray tech®

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MADE IN ITALY

