

# Gel joints Break

Fastest way to make an underground connection!

**No expiration  
date**

**5 years  
warranty**

**Re-enterable  
connection**



Gel joints Break series is suitable to guarantee insulation of low voltage main and shunted, single-pole and multi-pole connections ranging from 0,6/1 kV.

The list of products is made up of a series for main connections and a series for shunted connections. The first series allows single-pole and multi-pole connections with max. section respectively of 1x185 mm<sup>2</sup> and 4x25 mm<sup>2</sup>; the second series allows single-pole and multi-pole shunted connections with max. section respectively of 1x120 mm<sup>2</sup> e 4x10 mm<sup>2</sup>.

The insulation phase in each joint is made with a separator included in the kit or with the innovative modular insulated terminals, up to five phases with max. section of 35 mm<sup>2</sup>.

**Technical specifications**

- Protection degree IP68
- Operating temperature from -20 °C to +90 °C

**Regulations compliance**

- EN 50393 (0,6/1 kV)
- EN 60529
- RoHS Directive 2011/65/EC
- 20-37/2-1, 20-37/7
- EN 60695-2-11



**Break 25**

**Break 30**

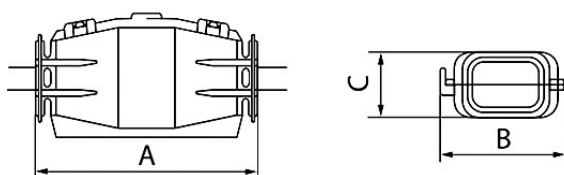
**Break 50**

**Break 50Y**

**Break 100**

<b>Order code</b>	MBG0025A24	MBG0030A24	MBG0050A24	MBG0050Y24	MBG0100A24
Dimensions A / B / C (mm)	70 / 42 / 24	100 / 59 / 34	165 / 62 / 36	220 / 100 / 50	180 / 105 / 36
Package (pcs)	4	5	3	1	1

**Dimensions**



**Installation**



1. Strip and crimp wires.



2. Dip connection in the gel and block wires at the ends with the included tie-wraps.



3. Verify clip closing and gel overflowing in wire input/output points in order to guarantee a perfect watertight seal.

## Components and characteristics

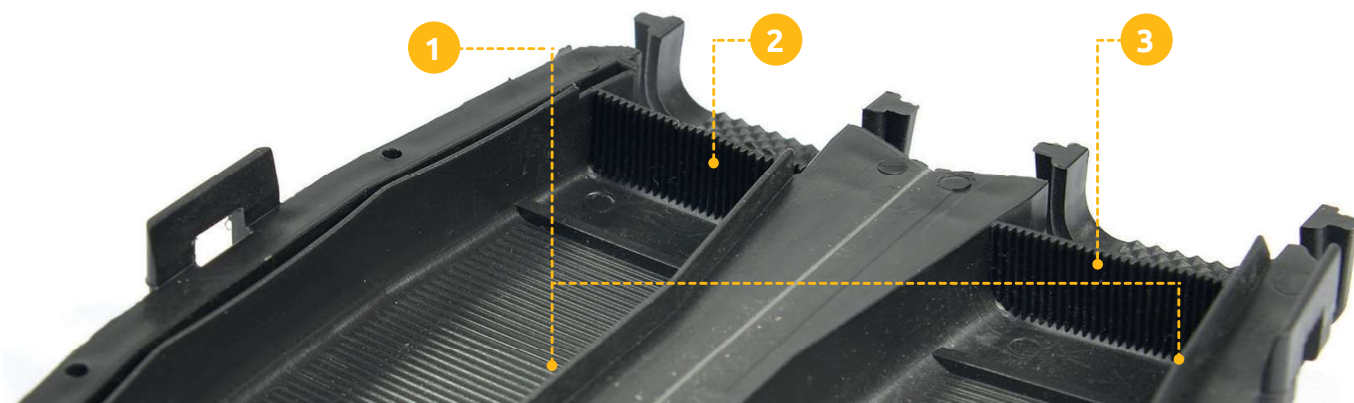
- Two polypropylene hinged shells with patented water tight system, made up of a longitudinal ribbing (1) functioning as the gel containing bulkhead. At both ends there are pre-fractured walls (2) that allow gel overflowing, ensuring a good water tightness.
- Wire slipping is avoided in longitudinal direction thanks to ribbing (3) at the ends of the shells and in transversal direction thanks to wire fixing with tie-wraps included in the package.
- Patented separator made up of two notched plates that allow a reciprocal jointing and two protrusions that block the plates.
- There are two holes at the ends of each model in order to insert and fix tie-wraps. Joint opening can occur only using a tool according to norm CEI 64-8.

## Advantages

- Re-enterable connection
- High mechanical strength with wide range of operating temperature
- Fast laying
- Cross-linked gel in the two shells (avoiding additional casting)
- Versatility of application, even in submerged conditions
- High watertight properties
- High dielectric strength
- Non sliding wires
- High strength against chemical agents or UV rays
- No expiration date

## Kit content\*

- Shell
- Tie-wraps
- Separator



Order code	Type	Connection type	●		●●				●●●				●●●●					
			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
MBG0025A24	Break 25	Main wiring	1,5	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Branching wiring	1,5	25	1,5	10	-	-	-	-	-	-	-	-	-	-	-	-
MBG0030A24	Break 30	Main wiring	1,5	50	-	-	1,5	10	-	-	1,5	4	-	-	1,5	2,5	-	-
		Branching wiring	1,5	50	1,5	35	-	-	-	-	-	-	-	-	-	-	-	-
MBG0050A24	Break 50	Main wiring	10	120	-	-	6	16	-	-	1,5	10	-	-	1,5	10	-	-
		Branching wiring	10	70	1,5	35	1,5	10	1,5	6	1,5	10	1,5	4	1,5	6	1,5	4
MBG0100A24	Break 100	Main wiring	35	185	-	-	16	50	-	-	4	25	-	-	6	25	-	-
		Branching wiring	25	150	10	120	10	35	6	25	4	16	2,5	4	6	16	2,5	10
MBG0050Y24	Break 50Y	Main wiring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Branching wiring	6	70	2,5	50	1,5	25	1,5	16	2,5	16	1,5	10	2,5	16	1,5	10

The range of product is made up of three single-pole models MC 06, MC 16, MC 35 that allow insertion of wires with max sections respectively of 6 mm<sup>2</sup>, 16 mm<sup>2</sup>, 35 mm<sup>2</sup>. Models with the same section can be assembled in different configurations from two up to five poles. In three- and five-pole

combination the result is a pyramidal structure that optimises space utilization, especially in applications of resin and gel joints break (see on page 87). It is also possible to create models with different sections.

**Materials**

- Self-extinguishing transparent polycarbonate - insulating case
- Brass CW 614 N – conductive case
- Zinc – plated steel – dowels

**Technical specifications**

- Operating temperature from -20 °C to +90 °C
- Rated insulation voltage: 500 V
- Rated current: 24 A (MC 06), 41 A (MC 16), 76 A (MC 35)
- Tightening torque dowels: 0,6 Nm ( MC 06), 1,8 Nm (MC 16), 10 Nm (MC 35)
- Inflammability grade according to UL 94 V-2
- Flame and ignition resistance according to IEC 695-2-1
- Compliance with glow wire test 850 °C (EN 60695-2-11)

**Advantages**

- Modular capacity from two up to five poles
- Fast and easy wiring
- Double insulation degree per joints connections
- Fast maintenance
- Re-enterable and reusable connection (needed mostly in joints)
- High protection degree
- Application flexibility
- Reduced space utilization with three- and five-pole pyramid structure

**Certification and regulations**

- IEC/EN 60695-2-11
- EN 60998-1:2004
- EN 60998-2-1:2004
- RoHS 2011/65/CE



**MC 06**

**MC 16**

**MC 35**

MAH0006A24

MAH0016A24

MAH0035A24

**Technical data**

In-line connection	max. wire section (mm <sup>2</sup> )	6	16	35	
Shunted connection	Feed through wire	min. section (mm <sup>2</sup> )	1,5	2,5	6
		max. section (mm <sup>2</sup> )	6	10	25
	Shunted wire	min. section (mm <sup>2</sup> )	1,5	2,5	6
		max. section (mm <sup>2</sup> )	1,5	4	10
Size (mm)	A	13,2	13,6	19,2	
	B	3,6	5,8	9,3	
	C	13,8	14,2	19,8	
	D	28	31	40	
Weight (g)		7	10	34	
Package (pcs)		10	10	5	

Maximum number of terminals recommended to use inside of gel joints break.

**Dimensions**

	<b>MC 06</b>	<b>MC 16</b>	<b>MC 35</b>
Break 25	1	1	-
Break 30	3	3	2
Break 50	5	5	2
Break 50Y	5	5	3
Break 100	5	5	5

