# Brakes

## Electromagnetically Released System

**For combination with**
DC-Micromotors:
2342, 2642, 2657, 3242, 3257, 3557, 3863
Brushless DC-Servomotors:
2444, 3056, 3564, 4490

## Series MBZ

| | MBZ | 12 V | 22 V | 24 V | |
|---|---|---|---|---|---|
| **Nominal coil data at 20°C** | | | | | |
| Supply voltage (DC) ±10% | $U_N$ | 12 | 22 | 24 | Volt |
| Resistance | R | 24 | 81 | 96 | Ω |
| Current | I | 0,50 | 0,27 | 0,25 | A |
| Power | $P_{2\ max.}$ | 6 | 6 | 6 | W |
| **Mechanical response times** [1] | | | | | |
| Coupling time | | 13 | | | ms |
| Disconnection time | | 27 | | | ms |
| Static torque rating [2] | | 400 | | | mNm |
| Moment of inertia | | 10 | | | $gcm^2$ |
| Max. permissible speed | | 16 000 | | | rpm |
| **Temperature range:** [3] | | | | | |
| Operating temperature | | – 5…+120 | | | °C |
| Storage temperature | | –25…+120 | | | °C |
| Weight | | 50 | | | g |

[1] Depending on the requirements, a Switch-off voltage-limitation function can be applied using an anti-parallel diode, varistor or other. However, this will influence the brake switching time.
[2] Under dry operation conditions, absolutely oil-free.
[3] Non condensing atmosphere.

### Features

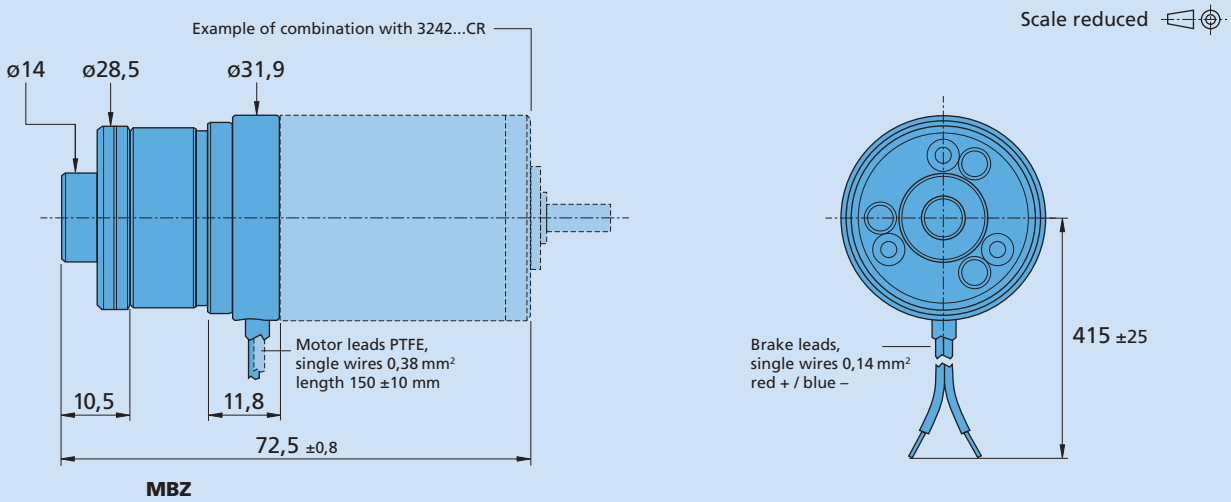
The brakes are designed as DC operated permanentmagnet single-surface brakes characterised by the fact that the braking effect is produced by a permanentmagnetic field (electromagnetically released system). This means that the required braking force is generated when voltage is removed.

In order to neutralise the braking effect, the permanentmagnetic field is counteracted by an opposing electromagnetic field.

The brakes are intended only for use as holding brakes (unsuitable for braking rotating motor shaft).

**Full product description**

- Examples:
  **3242G024CR MBZ22V**




For notes on technical data and lifetime performance refer to "Technical Information".
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