

## MAS23X Shaft Reinforcement and MAB23X Electronic Brake for NEMA23 motors



MAS23X-01



MAB23X-03



### Shaft Reinforcement MAS23X-01

The shaft reinforcement is designed for use with step and servo motors such as the MAC 50-141 series of integrated servo motors. It fits on all NEMA23 step- and servo motors with 6.35mm shaft. The Shaft Reinforcement contains a ball

bearing with an outer diameter of 35mm and an output shaft of 14mm. This ensures that the shaft can withstand even high radial and axial loads.

The output shaft and flange are compatible with Yaskawa/Omron SGM and SGMAH

200/400W flanges and makes it possible to replace existing motors with a MAC motor.

An M5 threaded hole at the shaft end makes it easy to mount a toothed or other drive disk.

### Electronic Brake MAB23X-01, MAB23X-03 and MAB23X-12

The electronic brake is designed to be mounted on step- and servo motors, such as the MAC 50-141 series of integrated servo motors.

A high quality electro-magnetic brake is mounted inside the housing. The brake has zero backlash and no auditory noise.

It fits on all step- and servo motors with NEMA23 flange and 6.35mm shaft.

The brake is used when it is desired to hold the motor shaft fixed at power off, or when the motor is used in a vertical linear application.

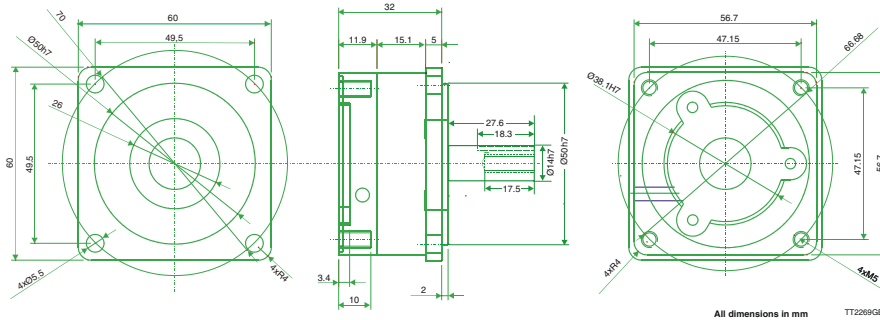
When 24 VDC is connected, the

brake will be deactivated and the motor can turn freely. It is recommended to use the brake only as a holding brake and not as an emergency brake.

An M3 threaded hole at the shaft end makes it easy to mount a toothed or other drive disk.

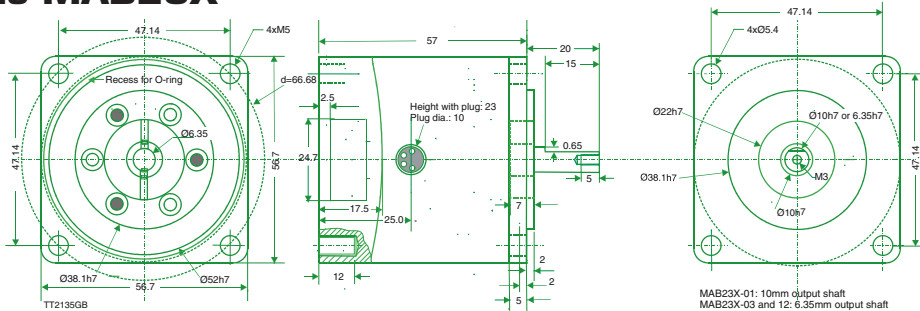
# MAS23X Shaft Reinforcement and MAB23X Brake

## Dimensions MAS23X



All dimensions in mm TT2289GB

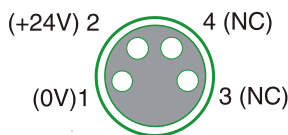
## Dimensions MAB23X



All dimensions in mm

## Specifications MAB23X

- Voltage: 24VDC  $\pm 10\%$
- Current: 450 mA
- Holding torque: 1.5 Nm
- Weight: 425 g
- Surface: Black anodized aluminium
- Velocity: Rated: 3000rpm, Max. 10,000Rpm
- All data  $\pm 10\%$
- Approval: VDE0580 and CE
- Connector: M8. Pin2+, Pin1-, Pin3 and 4 NC. Male 4-pin.



Socket front view

TT2156GB

	MAB23X 01	MAB23X 03	MAB23X 12
Radial load (N)	300	140	140
Axial load $F_{A1}$ (N)	50	50	50
Axial load $F_{A2}$ (N)	100	100	100
Inertia (kgcm <sup>2</sup> )	0.080	0.072	0.072
Output shaft $\varnothing$ (mm)	10	6.35	6.35
Connection	M8 *	M8 *	PG9 w. cable

\* Cable WI1000-M8F4A05N is delivered with the brake

## Accessories



WI1000-M8F4A05N. M8 female connector with 5 m cable. Pin 1 blue, pin2 brown, pin3 white, pin4 black. IP67.



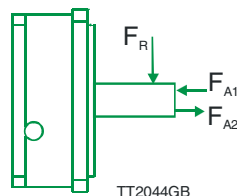
Lipseal for IP65 shaft protection  
MO0101 for MAB23x  
MO0103 for MAS23x



MO0012 O-Ring for flange protection

## Specifications MAS23X

- Radial load  $F_R$ : 280N
- Axial load:  $F_{A1}$  (towards motor) 20N\*
- Axial load:  $F_{A2}$  (towards drive disk) 140N
- Weight: 245g
- Surface: Black anodized aluminium
- Max velocity: 4500rpm
- MAS23X-01: 14mm Output shaft
- \* Typical value. Depends on motor ball bearings.



TT2044GB

## Application with JVL units

Both units can be mounted on all NEMA23 motors with 6.35mm shaft.

### JVL motors:

Step motors:

MST001A

MST002A

MST 230xx to MST232xx

Integrated servo motors

MAC050-MAC141

Integrated step motors

MIS231-MIS232

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