### **Product Data**





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









MAS23X-01

MAB23X-02

#### 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.

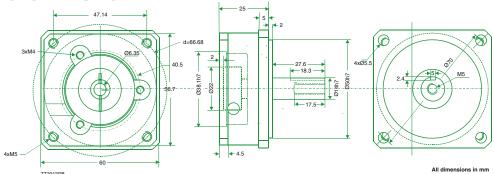
When 24 VDC is connected, the

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.

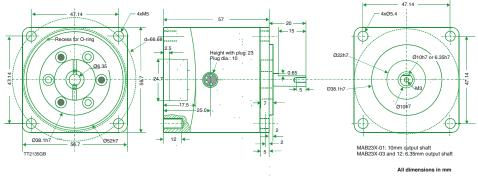
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### MAS23X Shaft Reinforcement and MAB23X Brake

#### **Dimensions MAS23X**



#### **Dimensions MAB23X**



## Specifications MAB23X

 $\begin{array}{lll} \mbox{Voltage:} & 24\mbox{VDC} \pm 10\% \\ \mbox{Current:} & 450\mbox{ mA} \\ \mbox{Holding torque:} & 1.5\mbox{ Nm} \\ \mbox{Weight:} & 425\mbox{ g} \\ \end{array}$ 

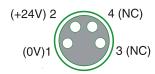
Surface: Black anodized aluminium Velocity: Rated: 3000rpm, Max.

10,000Rpm

Approval: VDE0580 and CE

Connector: M8. Pin2+, Pin1-, Pin3 and

4 NC. Male 4-pin.



Socket front view

TT2156GI

	MAB23X 01	MAB23x 03	MAB23x 12
Radial load (N)	300	140	140
Axial load F <sub>A1</sub> (N)	50	50	50
Axial load F <sub>A2</sub> (N)	100	100	100
Inertia (kgcm²)	0.080	0.072	0.072
Output shaft Ø (mm)	10	6.35	6.35
Connection	M8	M8	PG9 w. cable

#### **Accessories**



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



M00101 Lipseal for IP65 shaft protection



M00012 O-Ring for flange protection

# Specifications MAS23X

Radial load F<sub>R</sub>: 280N

Axial load:  $F_{A1}$  (towards motor) 20N\* Axial load:  $F_{A2}$  (towards drive disk)

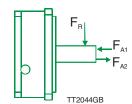
140N

Weight: 245g

Surface: Black anodized aluminium

Max velocity: 4500rpm

MAS23X-01: 14mm Output shaft \* Typical value. Depends on motor ball bearings.



## 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 MST234xx

Integrated servo motors

MAC050-MAC141

Integrated step motors

MIS231-MIS234



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