

# AQ Dynamic Mixer

## Continuously stirs and mixes liquids

AQ Dynamic Mixer operates with a powerful motor and a aseptic design. The liquid that it mixes is monitored using AQ Motor Controller MP72. The AQ Motor Controller MP72 controls mixer speed via Profibus DP or via 4-20mA input, it also communicates via profibus DP. More information of the AQ Motor Controller MP72 can be found in a seperate datasheet.

### ■ Design

AQ Dynamic Mixer is compact, and designed with pharmaceutical demands.

All wetted parts are made of acid-proof 316L steel and USP VI class plastic and gaskets. AQ Dynamic Mixer can be CIP (Clean In Place), the AQ Dynamic Mixer has full traceability with 2.1B certificates (gasket) and 3.1B certificates (316 L steel)

The connection is standard Tri-Clamp connection which gives good aseptic and makes it easy to assemble and disassemble.

The mixing stirrer is developed for maximum efficiency. It is completely smooth and electropolished with a Ra value of  $<0.4\mu\text{m}$  ( $<15\text{Ra}$ ).

### ■ Adjustable

The AQ Dynamic Mixer speed can be set between 25-1000rpm. At all speeds the mixer runs very quietly.

### ■ Reliable and flexible

AQ Dynamic Mixer is constructed with a brushless motor and no gearbox wich gives long reliable operating time.

All settings are easy to control via the interface in the external control unit, AQ Motor Controller MP72.



## Technical data Dynamic Mixer DM50

Weight: 1,8kg

Operating temperature: 0°C to 50°C

Ambient temperature: 0°C to 30°C

Maximum operating pressure: 0 to 3 bar g

Maximum temperature at CIP (clean in place): 65°C for max 20min.

Maximum motor voltage: 10VDC

Encapsulation with stirrer: IP56 according to NEMA 4X

Encapsulation without stirrer: IP40

Ambient Humidity: 0-90%

Speed: 25-1000 rpm

Maximum viscosity at 1000 rpm: max 4000 m Pa s

Maximum motor current: 5A

Continuous motor current: 4,2A

Maximum motor power: 45W

Continuous motor power: 35W

Maximum cable length: 20meters

Standard cable length: 2.5meters

Cable diameter: Maximum 9mm

Cable requirement: 8x0,5mm<sup>2</sup> (8x20AWG) shielded

Peak torque: 0,25Nm

Connection: TC - 50 (Tri-Clamp)

### Material:

Stirrer: 316L electropolished Ra <0.4um (<15Ra) (wetted part)

TC-50: 316L electropolished Ra <0.4um (<15Ra) (wetted part)

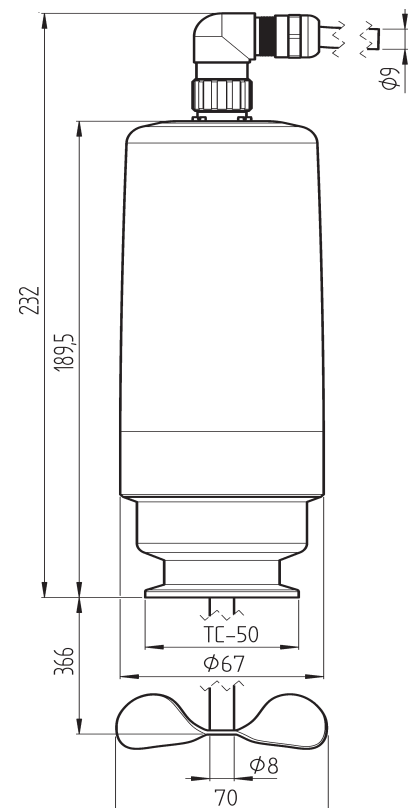
Sealing: O-ring and gasket USP VI class material.

Cover: Aluminium (anodized, not wetted part)

Connects to: AQ Motor Controller MP72 (Separate Datasheet)



Example, AQ Dynamic Mixer mounted on a glass tank



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