

AMD.05 - 08



TM06 1080 1414

General description

The Grundfos range of submersible, direct driven AMD.05 - 08 mixers is designed for mixing, i.e. homogenisation and suspension, of liquids of low to medium viscosity.

Features

The mixers are primarily designed for mixing and flushing applications in pump pits or tanks. The mixers are used to maintain suspension of the solids and to flush the solids down, thus replacing the conventional flush valve. The motor housing is made of stainless steel. The propeller is made of highly wear-resistant polyamide and it is self-cleaning.

The totally enclosed 4-pole, three-phase, 400 V, squirrel-cage induction motor is supplied as a complete unit. The motor is welded at the cable entry and manufactured in stainless material for optimum corrosion resistance. It is star-connected for direct-on-line starting. The dielectric oil in the motor distributes and diverts the heat and prevents the ingress of moisture. The motor must be protected against overload by means of an external motor-protective circuit breaker.

Note: The motor is not designed for operation via a frequency converter.

An operating time of 30 seconds will typically ensure suspension of solid particles.

Applications

Grundfos AMD.05 - 08 is designed for mixing in the applications mentioned below.

- solids suspension and flushing in pumping stations
- mixing in small tanks, approximately $\varnothing 3.5$ m, 2 x 4 m or 3 x 3 m
- Intermittent operation.

Characteristics of mixed or moved liquids

pH value	4-10
Liquid temperature	5-40 °C
Maximum density	1060 kg/m ³
Maximum sludge index	125 ml/g
Maximum dynamic viscosity	500 mPas
Chloride content	≤ 200 mg/l For stainless steel DIN 1.4301
Chloride content	≤ 1000 mg/l For stainless steel DIN 1.4404

Products

Product	Voltage [V]	Frequency [Hz]	Product number
AMD.05	3 x 400	50	99056116
AMD.07	3 x 400	50	99018155
AMD.08	3 x 380	60	99083810
AMD.08	3 x 460	60	99056115

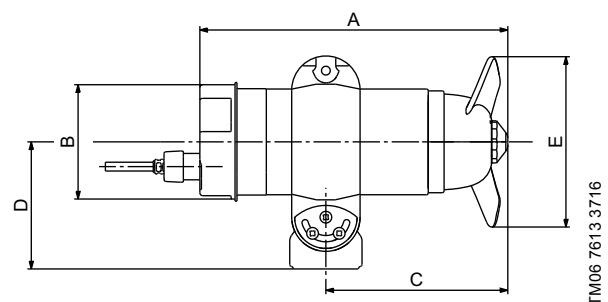
Technical data

Voltage tolerance	± 10 %
Power output, P2	0.42 - 0.67 kW
Rated current	1.44 - 1.62 A
Start current	9.3 A
Cos φ	0.58 - 0.84
Propeller speed	1430-1730 min ⁻¹
Axial thrust force	60-90 N
Enclosure class	IP68
Insulation class	F
Maximum installation depth	20 m
Maximum number of starts per hour	15
Standard cable length	10 m
Horizontal, maximum inclination angle.	±40 degrees

Thermal protection

The built-in thermal switch disconnects the motor at 100 °C and reconnects it after cooling.

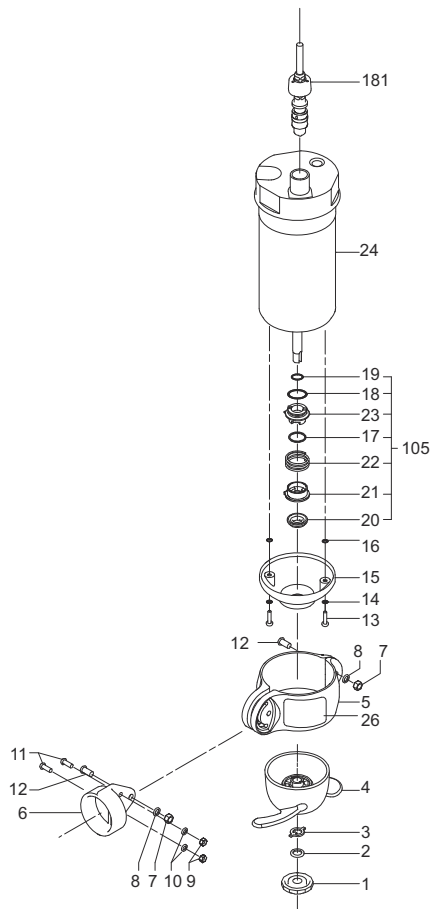
Dimensional sketch



TM06 7613 3716

Type	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Weight [kg]
AMD.05					160	
AMD.07	332	117	203	130	180	10.8
AMD.08					160	

Exploded view



TM06 6353 1216

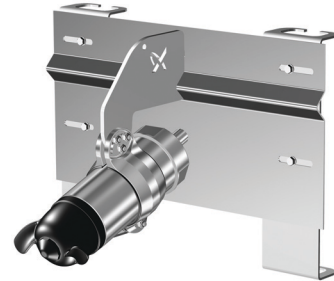
Materials

Pos.	Component name	Material
1	Hub screw	Stainless steel
2	Spring washer, M12	Stainless steel
3	Lock washer	Stainless steel
4	Propeller	Composite material, PA66, polyamide
5	Mounting clamp	Stainless steel
6	Mounting bracket, 2" thread	Stainless steel
13	Screw, M5 x 20	Stainless steel
14	O-ring, 5 x 1	Rubber
15	Seal cover	Composite material, PBT/PC, black
16	O-ring, 4.8 x 2.5	Rubber
105	Shaft seal	
24	Motor	
-	• Shaft end	Stainless steel
-	• Outer sleeve, stator housing	Stainless steel
181	Supply cable with plug	H07RN-F 4G1

Installation

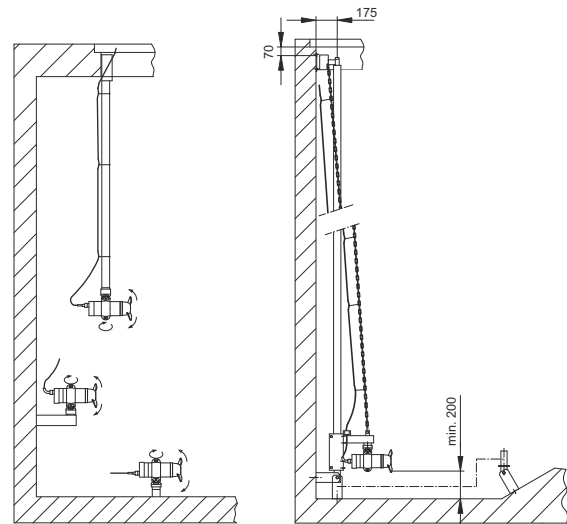
The following accessories are available for AMD mixers. See the drawings below:

- mixer bracket for pumping stations



TM06 7596 3616

- fixation bracket for suspended mounting
- tube for suspended mounting
- fixation bracket for wall mounting
- fixation base for floor mounting
- motor bracket for column profile tube mounting.



TM06 6343 1116 - TM06 6344 1116

Description	Material	Product no.
Mixer bracket for PS.S DN32 D1700	1.4301/304	99044262
Mixer bracket for PS.S DN40 D1700	1.4301/304	99044290
Mixer bracket for PS.S DN50 D1700	1.4301/304	99044296
Fixation bracket for suspended mounting	1.4401/316	95040132
Tube for suspended mounting, 2" thread, 3 m	1.4401/316	96115294
Fixation bracket for wall mounting	1.4401/316	96115291
Fixation base for floor mounting	1.4401/316	95115292
Motor bracket for column profile tube mounting	1.4401/316	96115295

99165101 1116

ECM: 1197225

Subject to alterations.