

JP-AIR3 Explosion-proof air operated motor

400 Watt at max. 6 bar operating pressure, Ex 2GD c IIC T6 (80 °C) X

made of stainless steel

Description

- The air operated motor JP-AIR 3 is a compactly built, robust explosion-proof air operated motor in accordance with the latest explosion protection guidelines ATEX 100a (94/9/EC), category 2. The pneumatic motor is explosion-protected to Ex 2 GD c IIC T6 (80 °C) X and has a type-certificate IBEX U05 ATEX B007 X. The motor JP-AIR 3 provides beside other air operated motors and the electric motor JP-400 maximum safety when pumping flammable media or for use in hazardous environments. At such applications for the drive motor and the pump tube separate approvals acc. to directive 94/9/EC (ATEX 100a) are required and a potential equalization has to be installed.
- The handy and powerful device (1,9 kg) can be used as a drive for the laboratory pump tubes (not ex-certified) or in hazardous areas for the ATEX certified sealless pump tubes made of stainless steel (Ø 41 mm), the mixing pump tubes in stainless steel, the stainless steel pump tubes with mechanical seal or complete drum emptying function and the eccentric screw pump tubes of series JP-700 SR PTFE ATEX. In combination with ATEX certified pump

tubes the drive is suitable for many low-viscous, neutral, slightly aggressive media and for highly flammable media with a flash point below 55 °C. Its sophisticated, technically clear structure ensures an efficient and safe use when transferring the wide range of media.

- The drum pump motor is characterized in addition to its robustness by its elegant design and ease of use. The non-stationary and stationary usable drive is particularly suitable for intermittent operation. The construction of the motor guarantees an high operational safety and a long lifetime.
- The very robust stainless steel 316Ti motor housing ensures a good chemical resistance when aggressive solvent vapours are present.
- The air operated motor is supplied with two silencers and a ball valve at the air inlet for controlling the compressed air and thereby the motor speed.
- The maximum density of the media is for the explosion-proof air operated motor JP-AIR 3 at 1.5, the maximum viscosity 600 mPas.

Air operated motor JP-AIR 3

400 Watt at max. 6 bar operating pressure, with silencer and a brass ball valve for control the compressed air. This regulates speed of the motor and varies pumping capacities.

Operating data JP-AIR 3

Flow rate (with hose and oval gear meter): up to 91 l/min (Rotor)*

Head: up to 13 m (Rotor)*

Viscosity: up to 600 mPas*

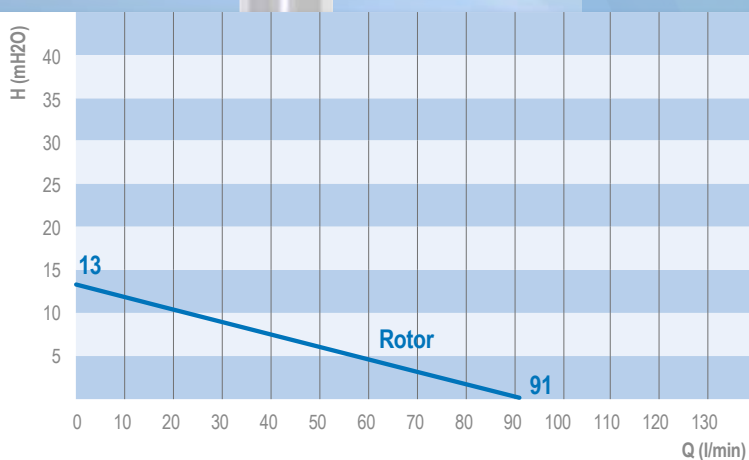
Density: up to 1,5*

*Data obtained with a 1" pipe are indicated in the performance curve

*Test media water 20 °C, pressure pipe 1", oval gear meter, measured values: ± 5%

Order No.:

JP-AIR 3 3003 0400
400 Watt at max. 6 bar operating pressure
Air consumption under load 13 l/sec.



JP-AIR3, JP-SS 41-1,000, test media water 20°C, pressure pipe 1", oval gear meter, measured values: ± 5%

All motors can be combined outside hazardous areas with all pump tubes over the hand wheel. Suitable pump tubes can be found on pages 37 to 42.

Pump tubes made of stainless steel 316 Ti

for transferring neutral, slightly aggressive media and especially flammable media like solvents and for use in food industry, Ø 41 mm

Stainless steel = SS pump tubes with Ex approval, outside ex-areas max. 90 and 120 °C

- With SS-pump tubes all neutral, low viscous media as organic and inorganic diluted acids and alkalies are mainly pumped. In addition these ATEX compliant pump tubes are used specifically for pumping highly combustible media such as solvents or gasoline and for use in explosive environments.
- Suitable for flammable media up to temperature class 4 and use in ex-zone 0.
- The pump tubes in stainless steel with a carbon bearing approved for the food sector are used since many years in the food industry and the beverage industry.

- Drive shaft made of stainless steel 316 Ti.
- Hose connection 1" included (¾" or 1¼" also possible).
- EC type examination certificate number ZELM 09 ATEX 0424X.
- Maximum medium temperature 90 °C (with PTFE rotor) or 120 °C or 120 °C (with SS rotor) outside ex areas.

Examples of media

Acetone
 Alcohol
 Ammonia
 Gasoline
 Flammable solvents
 Potassium hydroxide solution
 Sodium hydroxide solution
 Nitrovarnishes
 Perchloroethylene
 Phosphoric acid
 Sulfuric acid (up to 7.5% and over 90%)
 Trichloroethylene
 Toluene

In addition the stainless steel pump tubes are suitable for transferring thin fluid food such as fruit juices, milk, edible oils and all other at aluminium pump tubes mentioned media.



Material of pump tube	Pump tube diameter	Pump tube length	Version	Order No.
Stainless Steel 316 Ti Stainless steel shaft EC type-certificate ZELM 09 ATEX 0424 X Ex II1/2 G c II B T4	Ø 41 mm	700 mm	Rotor	2241 0070
			Impeller	2241 0071
	Ø 41 mm	1,000 mm	Rotor	2241 0100
			Impeller	2241 0101
	Ø 41 mm	1,200 mm	Rotor	2241 0120
			Impeller	2241 0121
	Ø 41 mm	1,500 mm	Rotor	2241 0150
			Impeller	2241 0151
	Ø 41 mm	1,800 mm	Rotor	2241 0180
			Impeller	2241 0181
	Ø 41 mm	2,100 mm	Rotor	2241 0210
			Impeller	2241 0211
	Ø 41 mm	2,400 mm	Rotor	2241 0240
			Impeller	2241 0241
	Ø 41 mm	2,700 mm	Rotor	2241 0270
			Impeller	2241 0271
	Ø 41 mm	3,000 mm	Rotor	2241 0300
			Impeller	2241 0301
Rotor or impeller made of stainless steel full material for stainless steel pump tubes Ø 41 mm			Rotor	2710
			Impeller	2725

