

# Rexroth Sytronix

## Motor-Pump Unit MPAT1

### PGM/PGH - MAS

Mounting Instructions

**R912005194****Edition 01**

#### About this Documentation

This documentation is for fitters and service engineers. This documentation contains important information to safely and properly assemble the product.

#### Validity of this Documentation

This documentation is valid for the following motor-pump units:

MPAT1-PGM4NE-032NNNN-VBA-15KBBHA-TN3A-NN	
<b>Pump 1</b>	<b>Length</b>
PGM Size 4.....= PGM4	BG 160: 720 mm; BG 180: 790 mm.....= B
PGM Size 5.....= PGM5	BG 132: 630 mm; BG 160: 800 mm.....= C
PGH Size 4.....= PGH4	BG 132: 690 mm.....= D
<b>Generation</b>	<b>Motor power</b>
3 X (PGM5, PGH4).....= D	9 kW.....= 9K0
4 X (PGM4).....= E	13 kW.....= 13K
<b>Displacement size 1. pump</b>	15 kW.....= 15K
32.....= 032	18.5 kW.....= 18K
40.....= 040	22 kW.....= 22K
50.....= 050	27 kW.....= 27K
63.....= 063	
80.....= 080	
	<b>Assembly / pump alignment</b>
	MPA mounted
	- Suction port bottom.....= B
	- Suction port left.....= L
	- Suction port right.....= R
	- Suction port top.....= T

Type coding motor-pump units

#### General Safety Instructions

- Observe the valid regulations about accident prevention and environmental protection.
- Heed the safety regulations and instructions of the country in which the product is used.
- Use Rexroth products only in proper state.
- Please observe all notes on the product.
- Only use accessories and spare parts which are permitted by the manufacturer to prevent from risk of injury due to unsuitable spare parts.

#### Qualified Personnel

Installing of motor-pump units MPAT1 must be done by qualified Personnel or competent persons. A person is qualified, if knowledge or experiences of respective standards and regulations exists. Assigned work must be evaluated and possible danger be recognized.

#### Scope of Delivery

1 x Motor-pump unit MPAT1

#### Tools and Auxiliary Materials

Keep the following tools and auxiliary materials ready for assembly:

- 1x Open-end wrench SW30 or
- 1x Open-end wrench SW27 or

- 1x Open-end wrench SW21 or
- 1x Open-end wrench SW16
- Lifting devices

#### Transport the Motor-Pump Unit with Cranes or Lifting Tools

The transport with cranes or lifting tools may only be done with suitable lifting means, like e.g. lifting belts, belts and chains. The components have the following lifting points for ring screws DIN 580.

- 9K0, 13K, 15K (2-M8)
- 18K, 22K (2-M10)
- 27K (2-M12)

For further information about carrying capacity of the ring screws refer to the DIN 580 standard.

#### Weight of Motor-Pump Units

Pump	PGM4					PGM5	PGH4
Nominal size	25	32	40	50	63	80	50
Weight kg	12	12.5	13.5	14	14.5	36.5	17

Weight internal gear pumps

Power	9K0	13K	15K	18K	22K	27K
Weight kg	73	83	83	114	135	194

Weight MAS motors

Power	9K0, 13K, 15K	18K, 22K	22K	27K
Pump	PGx4	PGx4	PGM5	PGM5
Weight kg	11	18	24	24.5

Weight motor component bellhousing

Power	9K0, 13K, 15K	18K	22K	22K	27K
Pump	PGx4	PGx4	PGx4	PGM5	PGM5
Weight kg	1.2	1.2	4.4	4.1	5.5

Weight motor component coupling

The specified weights are valid for the components only, weights of motor-pump combinations add together from the single values.

- Ensure a sufficiently dimensioned loading capacity of the lifting tools to ensure a safe transport of the weight of the motor-pump unit or the single parts.

**Check Motor-Pump Unit**

- Check the motor-pump unit for visible damage.
- Deviating installation measures or tolerances can result in a wrong assembly. Check and correct the failure cause before you mount the motor-pump unit into the construction.

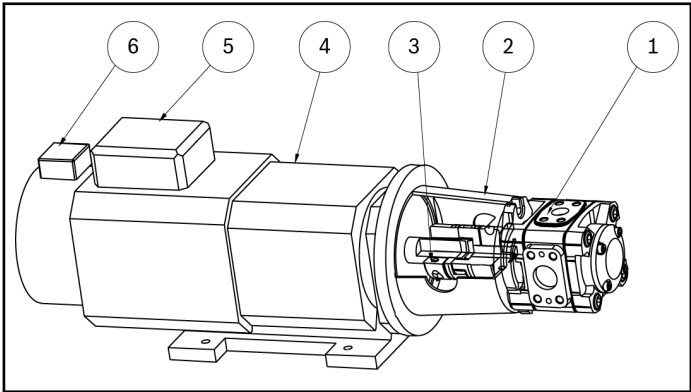
**Permitted Installation Positions of the Motor-Pump Unit**

The motor-pump units are assembled and delivered in installation position IM B35 according to EN 60037-7.

**Installation MPAS1-PGM/PGH-MAS**

The screw connection must be adjusted to the installation situation (screw-length, property class, screw-in depth, material, ...). The dimensioning of the screw connection is in the responsibility of the customer.

- Assemble in dry, dust free environment.
- Ensure a burr-free machine-side contact surface.
- Securely screw the motor-pump-unit with the machine construction.



- 1 Pump
- 2 Bellhousing
- 3 Coupling
- 4 Servo motor
- 5 Terminal box
- 6 Fan terminal box

Assemble motor-pump unit MPAT1 into the construction

Fastening	Power	Hole $\varnothing$ [mm]	Screw	Washer
Foot fastening motor (A)	9K0, 13K, 15K	12	M10	Yes
	18K, 22K	15	M14	Yes
	27K	22	M20	Yes

MPAT1 fastening accessories

**Foot fastening motor (A)**

The motor must be fastened with screws (4xM10 or 4xM14 or 4xM20) by the customer. For connection dimensions refer to the dimension sheet.

**Additional Documentation**

All documentation listed in the following are very important for the whole system. They are available in the Bosch Rexroth Media Directory. <http://www.boschrexroth.com/various/utilities/mediadirectory/index.jsp>

Title	Material number (R911...) Documentation type (Dok-...)
Safety Notes and Instructions on Use Motor-Pump Unit	R911339831 DOK-SYTROX-SAFETY*MP**-SARS-EN-P
Mounting and Commissioning Internal Gear Pump PGH/PGM/PGF	R911340908 DOK-SYTROX-PG**-*****-ASRS-EN-P

Additional valid documentation

