

Diaphragm vacuum pumps for V-belt drive

si 0056 **GB**

1. For various vehicles

MSI-PG 07.01

2. For universal use

Vehicle:	Citroen / Ford Peugeot / Suzuki Talbot	Product: Vacuum pump Pierburg-No.	Replacem.-No.	O.E.-No. *)
Type various see TECDOC-CD		7.15680.00.0	7.21107.50.0	45 65.13 / 9350 020380 / 93 50261980
		7.20586.01.0		
		7.21107.00.0	7.21107.51.0	45 65.12 / 93 50073380 / 93 50262080
		7.15535.00.0		
		7.20107.01.0	7.21114.50.0	1 583 157 / 11029/86 CA0 / 93 502621 93 50262180 / 78 GB 2A451 CA
		7.20586.02.0		
		7.20491.02.0	7.21431.51.0	EJP 8002 / 45 65.17 / 96 00650980
		7.21114.00.0		
		7.21431.01.0		

These diaphragm vacuum pumps are fitted in great quantities to various vehicles in production. Furthermore, it is an universally applied vacuum pump, and due to its own oil household, it does not have to be connected to any engine-sided oil supply.

Characteristics

The following characteristics refer to all vacuum pumps specified here

- **Final pressure Pe:** max. -772 mbar at 1000 rpm of drive shaft
- **Drive speed or stroke number:** max. 5000 rpm
- **Power consumption against final pressure:** about 80 W at 3500 rpm of V-belt pulley
- **Weight:** about 1200 g

Distinguishing features, see table:

- Arrangement of hose connections (angle α), See also Fig. 2.
- With or without V-belt pulley.



Fig. 1 Vacuum pump without V-belt pulley

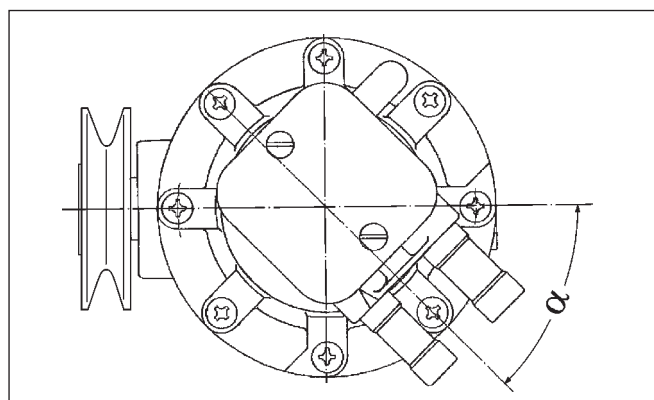


Fig. 2 Vacuum pump with V-belt pulley
 α = Angle of hose connections to longitudinal axis

Vacuum pump Order-No.	$\alpha = \sphericalangle$ (Fig. 2)	V-belt pulley
7.21107.50.0	45°	without
7.21107.51.0	180°	without
7.21114.50.0	0°	without
7.21431.51.0	90°	with (pressed on)

Reg. Nr. 4/4 00-133.2 / GB

Subject to change of illustrations and text.

For changes with regard to respective matching and replacements, refer to the catalogs, TECDOC-CD or systems basing on TECDOC-data, which are currently in effect.

*) The listed reference numbers should be listed for comparison only. They may not be used on invoices sent to final users.

General information

- Vacuum pumps with V-belt drive are ideal for various applications with proper installation, see below.
- These pumps have their own oil household and are filled with 40 cm³ HD-SAE 15 W-40. The oil level must be checked every 30000 km as follows:

Carefully unscrew filler screw (1), Fig. 3. With the pump in the correct mounting position, check that oil discharges properly from the opening; refill oil if necessary. Retighten filler screw with a torque of 25 Nm.

- Important:**
- Do not use any synthetic oils.
 - Ensure cleanliness.

Testing and test values

As described in "Service Tips & Infos Vacuum Pumps".

Important: The test values should only be referred to when using a vacuum pump tester.

Test device

Vacuum pump tester: Order No: **4.07370.06.0**

For correct installation, the following information and suggestions should be observed

Replacement in production vehicles

Installation and adjustment of the V-belt tension must be carried out according to the vehicle manufacturer's instructions.

For other applications, Figs. 3 and 4

1. Fixing with double swivel arms and V-belt tensioner (tensioning bar).
Instead of the tension bar, a permanent connection can also be established, whereby the belt tension takes place via a split V-belt pulley. In this case, the belt tension can be adjusted by inserting or removing spacers between the V-belt pulley.
The mounting position shown in Figs. 3 and 4 must be maintained in order to ensure perfect lubrication of the drive parts.
For swivel arm fixing, the base dimension of the tensioning block must be kept to exactly.
2. Drive by V-belt via screw-type V-belt pulley. Maintain a maximum distance of 48 mm between V-belt pulley and tensioning block.
3. The correct belt tension depends on various parameters, e.g. the mounting and drive situation of the vacuum pump at the engine and the vacuum pump itself.

Generally applicable to the bearing load of the vacuum pump is a belt tension per strand (strand force) of maximum 70 N in a static condition.

4. The direction of rotation is irrelevant, but should not be changed after the running-in period.

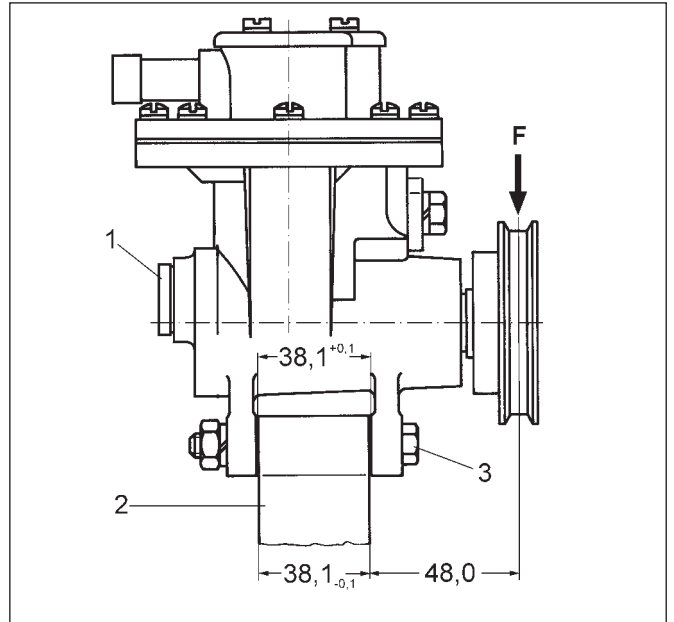


Fig. 3

To Figs. 3 and 4 dimensions in mm

- | | |
|--------------------|------------------|
| 1 Oil filler screw | 4 Tensioning bar |
| 2 Tensioning block | 5 V-belt |
| 3 Bolt M8 | 6 4 x M6 |

F = Normal force in axial direction max. 140 N
60° = Mounting position limit

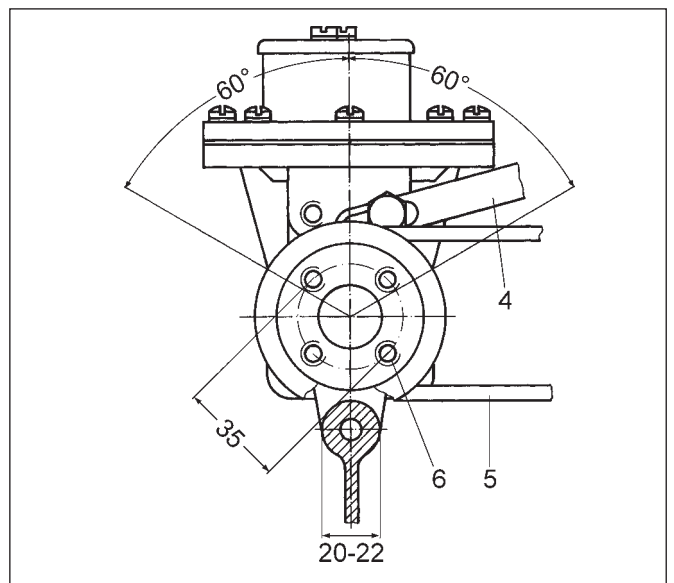


Fig. 4