

Electric Diaphragm Vacuum Pump for universal applications

Vehicle:	Various	Pierburg No.:	Replacement for:	O.E. No.: *)
Product:	Electric vacuum pump	7.22917.53.0	7.20962.10.0 7.21808.01.0/.04.0 7.22917.00.0/.03.0	30 882431 6006 003626
	Control unit	4.05299.53.0	4.05299.50.0/.51.0	

A low pressure is frequently used as a source of auxiliary energy for the purpose of actuating pneumatically operated equipment and facilities ("setting elements", "actuators").

The necessary low pressure can be produced by a vacuum pump, for example.


In vehicles, the vacuum pump is driven by the vehicle's motor via V-belts, gears, cams and tappet rods.

The electric diaphragm vacuum pump is exceptional.

Since it is not dependent on being driven mechanically by the vehicle's engine, it may be installed at any desired location within the vehicle.

This vacuum pump can also be used in general applications in all cases where a low pressure is required:

- For servo support in
 - electric vehicles,
 - boats,
 - sports cars,
 - electric wheelchairs.
- As a retrofit option for all vehicles for which no suitable replacements are available any more.

 The vacuum pump is not designed for continuous operation.

It must only be operated in connection with the corresponding control unit 4.05299.53.0.

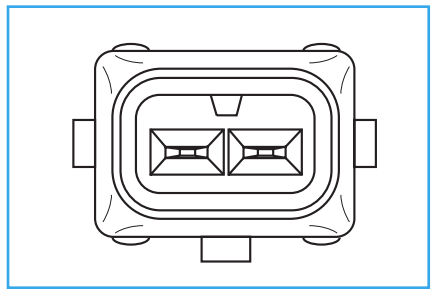


Features:

- Diaphragm pump with DC motor
- No mechanical drive is required
- No oil supply is necessary
- Maintenance-free
- Low-power consumption
- On-demand switch on
- Long service life
- Low noise level through vibration absorbers

Technical Data		
Nominal voltage:	[V]	12
Operating voltage:	[V]	9 ... 15
Maximum current consumption:	[A]	2.3 (at 12 V)
Attainable ultimate pressure:	[mbar]	- 800
Permissible ambient temperature:	[°C]	-30 ... + 80
Hose connection:	[mm]	12 dia.
Dimensions (LxWxH):	[mm]	168 x 112 x 132
Weight: 0.95 approx.	[kg]	0.95 approx.
Protection class:		IP 54
Noise level:	[db(A)]	≤ 63
Installation orientation:		Motor axis horizontal ±30°

Electrical Connection



The electric vacuum pump is equipped with a connection for a 2-way plug shell.

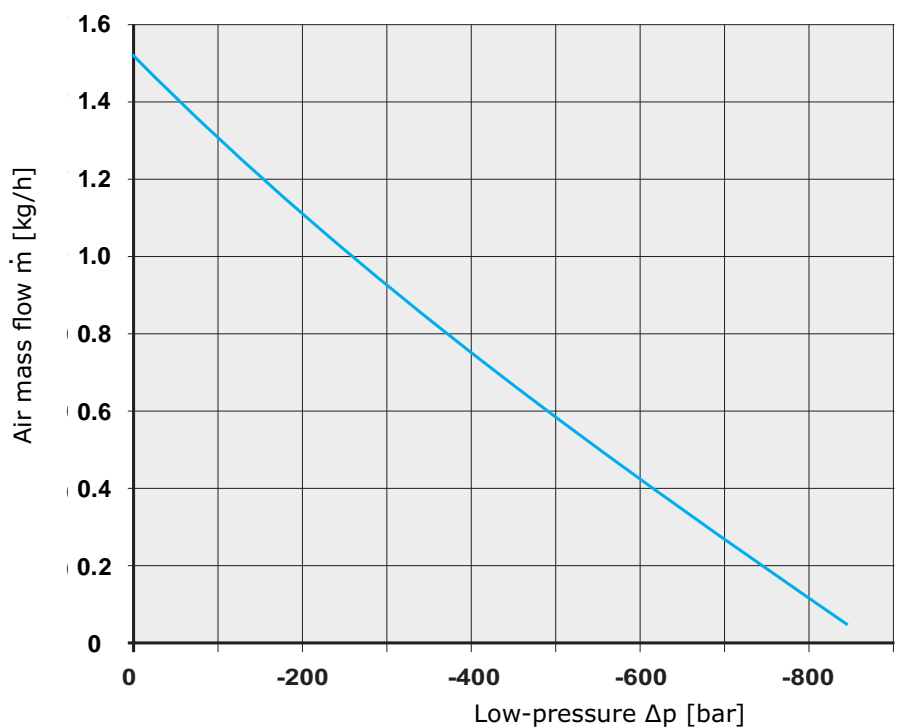
The following plugs can be used, for example:

- Company Reinshagen "MINI-TIMER AK 7509"
- Company Bosch "Junior Timer"

Electrical connection

Pressure vs. volume flow diagram

At U = 12 V



Installation Information

The electric vacuum pump may be placed independently of the specific application at any location within the vehicle.

! The vacuum pump is not suited for continuous operation. Continuous operation of the pump will cause it to overheat and suffer permanent damage.

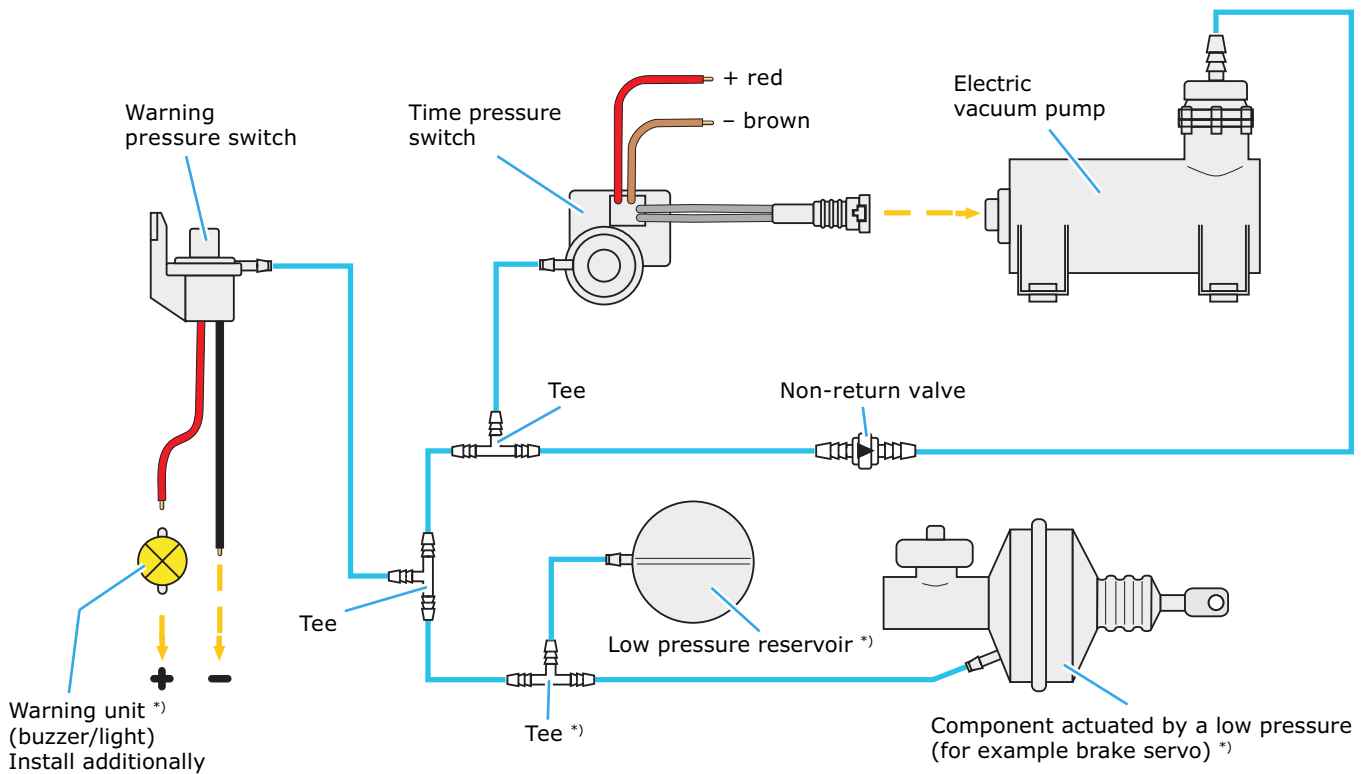
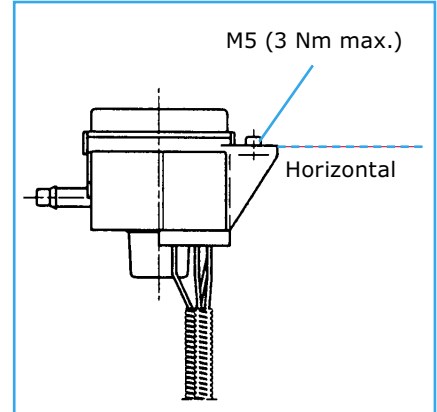
For this reason the vacuum pump must never be operated without the control unit 4.05299.53.0.

The control unit monitors the low pressure level within the system.

- After approximately 30 seconds of operation, the vacuum pump is switched off.
- As soon as the pressure increases to approximately -550 mbar, the vacuum pump is switched on again.
- When the pressure increases to approximately -340 mbar, the warning pressure switch will output a signal.

! If the vacuum pump switches itself on and off in noticeably short intervals, then it is likely that there is a leak in the system (hoses, connectors, low pressure reservoir).

Installation Orientation of the Time Pressure Switch



*) Not part of the delivery scope.