
Vapour recovery
Made in Germany

DÜRR TECHNIK

# MEX Vapour recovery

## The original from Dürr Technik

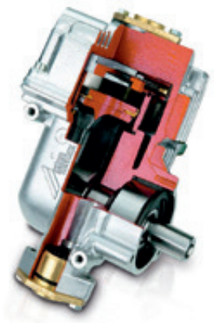
In many countries around the world it is compulsory that filling stations be fitted with a vapour recovery system.

Since 2009 the EC Directive 2009/126/EC requires the installation of Stage II vapour recovery systems in the petrol pumps.

These systems suck off the petrol vapourair mixture at the filling nozzle and pump it back into the storage tanks of the petrol station. Thus, the escaping petrol vapours – which are harmful to health and the environment – cannot get into the atmosphere.

Legal requirements and automatic monitoring systems place the highest demands on the reliability of vapour recovery systems.

In case of a problem with the vapour recovery the filling station operator is required by law to switch off the petrol pump within a certain limited period of time. In Germany this period is 72 hours.
The key factor for a trouble-free vapour-recovery system is a reliable vapour recovery pump with a constant flow volume.
Since 1994 Dürr Technik has manufactured the MEX piston pump, which was developed especially for vapour recovery. The fact that there are several hundred thousand such pumps in operation all over the world bears witness to their reliability and flexibility.

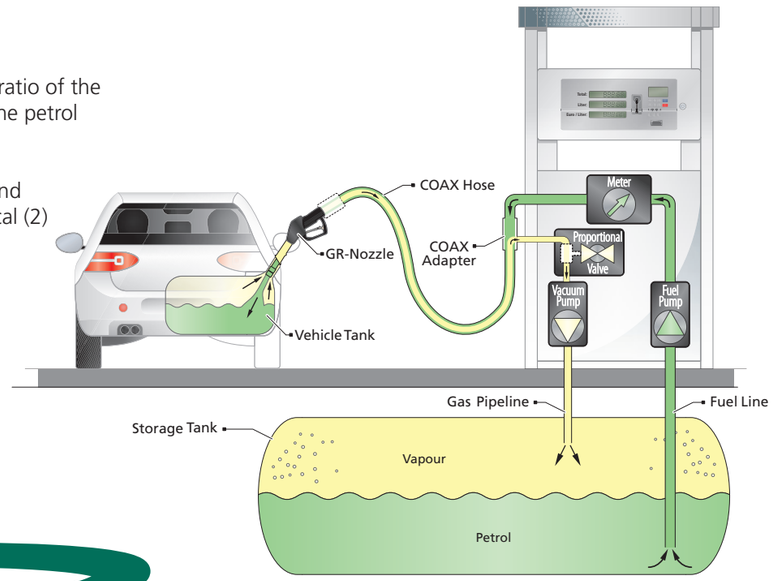


**Belt drive**
**MEX 0831**

## Functioning

The function is based on regulating the ratio of the fuel pumped into the vehicle tank and the petrol vapour sucked off.

This ratio is set to 1:1 (proportionality) and controlled by a mechanical (1) or electrical (2) proportional valve.




## Convincing advantages

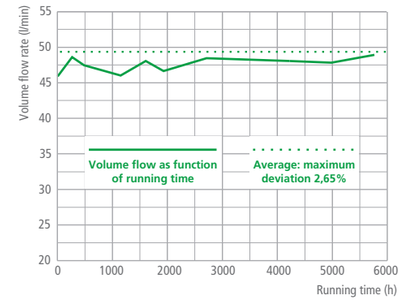
### Various driving systems
- Belt drive
- Direct drive

### Reliable and long service life
- Certified according to ATEX, TÜV, QS, PTB and PCEC
- Constant flow volume throughout its entire service life of the vapour recovery pump

### Robust and flexible
- Condensate resistant thanks to a patented prechamber with drainage system
- Wide temperature range from -40 up to +60° C
- Independent of rotation direction
- Suitable for direct assembly and retrofit
- Applicable for systems with electric as well as mechanical proportional valves

### Service friendly
- Pump head can be disassembled by a special coupling without dismounting the motor
- Pump heads can be fitted on all motor versions and are therefore universally useable
- Quick, uncomplicated and cost-saving

### Characteristic volume flow rate of MEX pumps at a speed of 2,000 rpm




### Maintenance-free
- Self-adjusting piston sealing for constant flow volume throughout the complete service life of the vapour recovery pump

### Safe
- Flame trap
- Temperature protection
- Explosion protection according to ATEX
- „E85“ suitable

Dürr Technik ■ Quality
■ Made in
■ Germany

**Belt drive**
**MEX 0831**

**Direct drive**
**1-cylinder**
**MEX 0544-1...**

**Direct drive**
**2-cylinder**
**MEX 0544-2...**

## Technical data belt drive MEX 0831

| Type | Flow volume V (l/min) | End pressure (mbar) | Recommended motor power (W) | Max. permissible speed of rotation (1/min) | Dimensions L x W x H (mm) |
|---|---|---|---|---|---|
| 0831-11/600 | 44 | ~150 | 150 (200) | 2300 | 148x88x188 |

**Accessories: pulley (94 mm effective diameter), replacement pumps and motors on request.**

## Technical data direct drive 1-cylinder MEX 0544-1...

| Type | Flow volume V (l/min) | End pressure (mbar) | Relay (V) | Motor ratings | | | | Dimensions L x W x H (mm) |
|---|---|---|---|---|---|---|---|---|
| | | | | Wattage rating P1 (W) | Rated current (A) | Nominal voltage (V) | Frequency (Hz) | |
| 3~motor 50 Hz | | | | | | | | |
| 0544 1000K | 53 | ~150 | 24 DC | 285-312 | 0,75 | 380-415 | 50 | 310x152x201 |
| 0544 1100K | 53 | ~150 | without | 285-312 | 0,75 | 380-415 | 50 | 310x152x201 |
| 0544 1700K | 53 | ~150 | 220-240AC | 285-312 | 0,75 | 380-415 | 50 | 310x152x201 |
| 1~motor 50 Hz | | | | | | | | |
| 0544 1200K | 53 | ~150 | 24 DC | 440-480 | 2,20 | 200-240 | 50 | 365x152x201 |
| 0544 1250K | 53 | ~150 | 220-240AC | 310 | 1,35 | 230 | 50 | 315x152x201 |
| 0544 1300K | 53 | ~150 | without | 440-480 | 2,20 | 200-240 | 50 | 365x152x201 |
| 1~motor 60 Hz | | | | | | | | |
| 0544 1400K | 38 | ~150 | 24 DC | 200-230 | 1,80 | 110-127 | 60 | 365x152x201 |
| 0544 1500K | 38 | ~150 | without | 200-230 | 1,80 | 110-127 | 60 | 365x152x201 |
| 0544 1800K | 38 | ~150 | without | 250 | 1,15 | 220 | 60 | 365x152x201 |

## Technical data direct drive 2-cylinder MEX 0544-2...

| Type | Flow volume V (l/min) | End pressure (mbar) | Relay (V) | Motor ratings | | | | Dimensions L x W x H (mm) |
|---|---|---|---|---|---|---|---|---|
| | | | | Wattage rating P1 (W) | Rated current (A) | Nominal voltage (V) | Frequency (Hz) | |
| 3~motor 50 Hz | | | | | | | | |
| 0544 2000K | 53 | ~150 | 24 DC | 340-375 | 0,90 | 380-415 | 50 | 432x152x201 |
| 0544 2100K | 53 | ~150 | without | 340-375 | 0,90 | 380-415 | 50 | 432x152x201 |
| 0544 2700K | 53 | ~150 | 220-240AC | 340-375 | 0,90 | 380-415 | 50 | 432x152x201 |
| 3~motor 60 Hz | | | | | | | | |
| 0544 2850K | 38 | ~150 | 24 DC | 260-280 | 1,20 | 220-230 | 60 | 432x152x201 |
| 1~motor 50 Hz | | | | | | | | |
| 0544 2200K | 53 | ~150 | 24 DC | 660-720 | 3,00 | 220-240 | 50 | 487x152x201 |
| 0544 2250K | 53 | ~150 | 230 AC | 690 | 3,00 | 230 | 50 | 487x152x201 |
| 0544 2300K | 53 | ~150 | without | 660-720 | 3,00 | 220-240 | 50 | 487x152x201 |
| 1~motor 60 Hz | | | | | | | | |
| 0544 2400K | 53 | ~150 | 24 DC | 320-370 | 2,90 | 110-127 | 60 | 487x152x201 |
| 0544 2500K | 38 | ~150 | without | 320-370 | 2,90 | 110-127 | 60 | 487x152x201 |
| 0544 2800K | 38 | ~150 | without | 330 | 1,50 | 220 | 60 | 487x152x201 |

**Remarks:**

V = flow volume at counter pressure $p_e$ = 150 mbar and a suction pressure $p_{abs}$ = 900 mbar

Pumping medium: air

Noise level < 70 dB(A)

$p_{abs}$ = absolute pressure

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Edition 04/2018