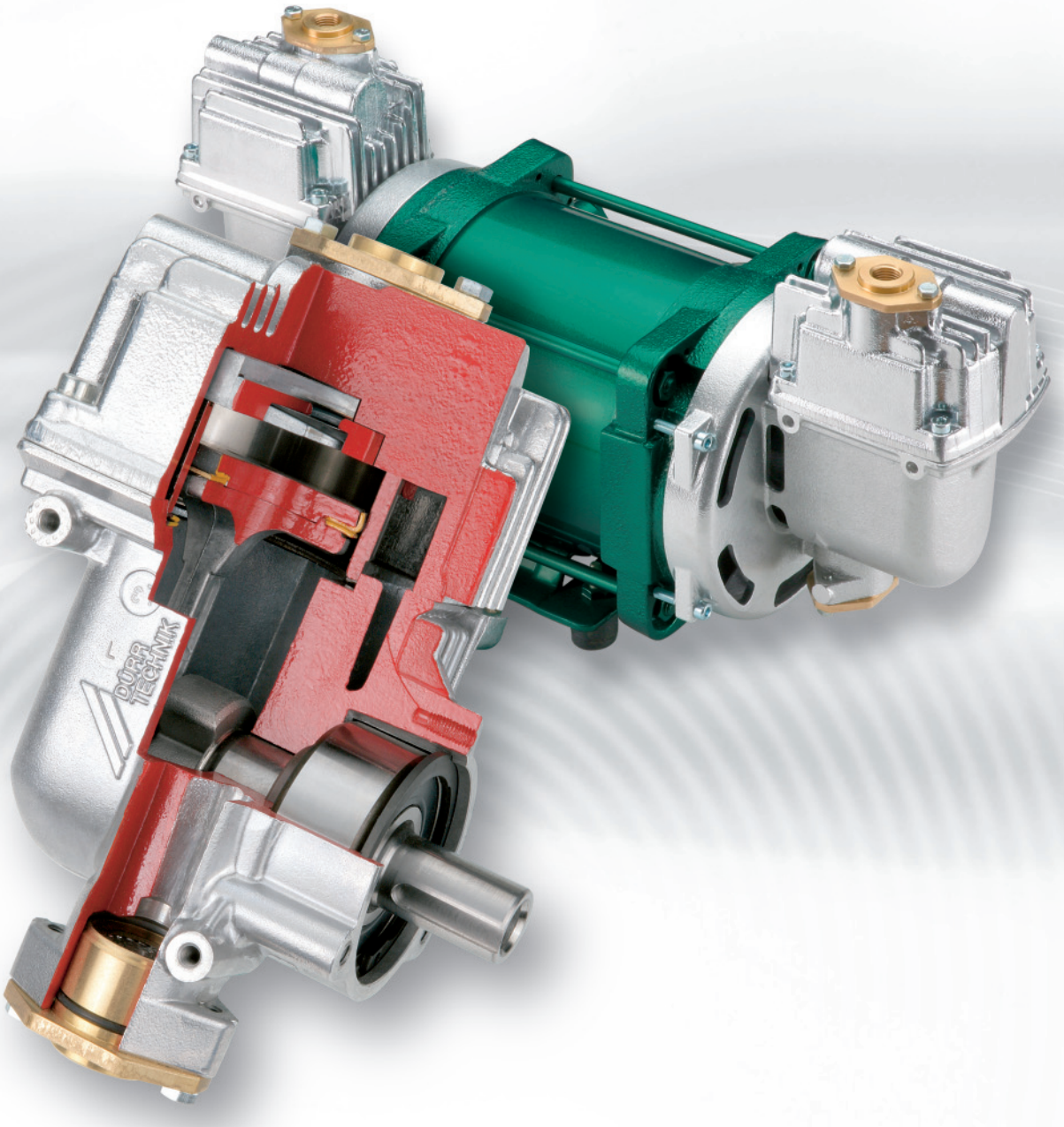
Reliable – Robust – Maintenance Free

Vapour Recovery Pump Type MEX



DÜRR TECHNIK

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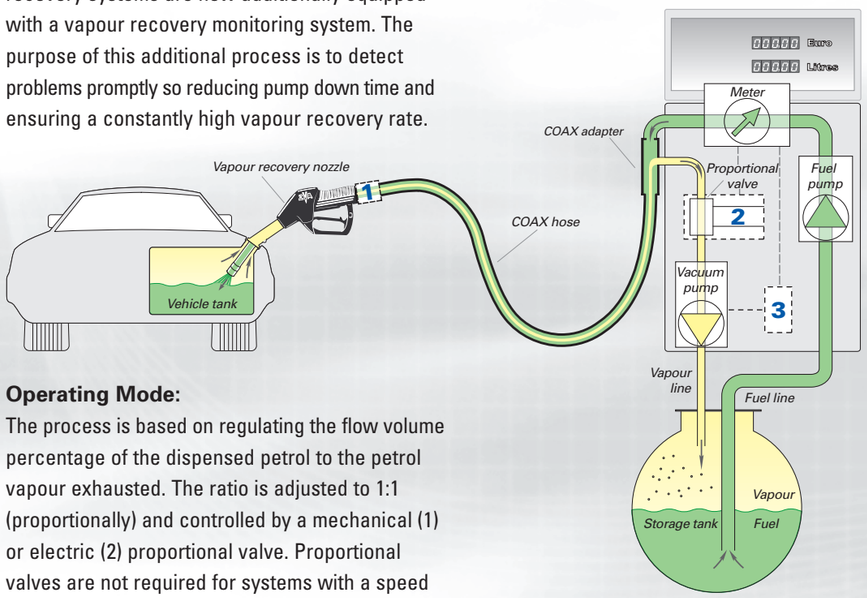
Leading by Our Experience

Consultation, development and production from one source for economical system solutions

Vapour Recovery phase II is stipulated by law in many European countries. The objective is to return the petrol vapour back into the storage tank, which otherwise would exhaust into the environment when re-fuelling a car. Consequently vapour recovery systems complete with vapour recovery pumps are installed into the fuel forecourt-dispensing pump.

In Germany, since the beginning of 2003 the vapour recovery systems are now additionally equipped with a vapour recovery monitoring system. The purpose of this additional process is to detect problems promptly so reducing pump down time and ensuring a constantly high vapour recovery rate.

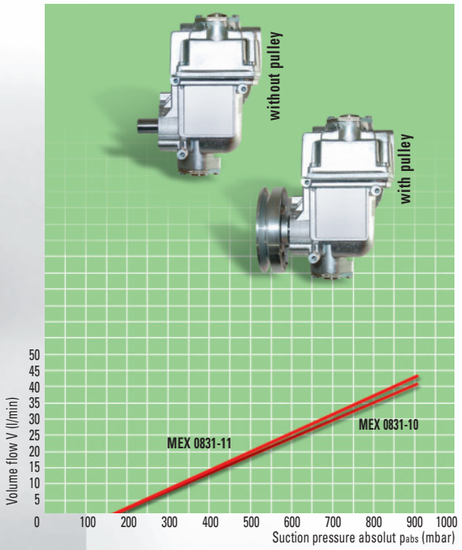
Dürr's vapour recovery pump is a proven standard product providing a trouble-free operating vapour recovery system. A constant flow volume is therefore maintained throughout the whole lifetime of the pump. The following diagram shows the main components of a typical vapour recovery system without vapour recovery monitoring.



Operating Mode:
The process is based on regulating the flow volume percentage of the dispensed petrol to the petrol vapour exhausted. The ratio is adjusted to 1:1 (proportionally) and controlled by a mechanical (1) or electric (2) proportional valve. Proportional valves are not required for systems with a speed control (3).

Advantages of the MEX-Vapour Recovery Pump:

- Long service life
- Patented pre-chamber with drainage system guaranteeing resistance against condensate and liquid
- Self-adjusting piston lining for a constant volume flow throughout the whole lifetime
- Wide temperature operating range -40 °C to +60 °C
- Small and robust, suitable for installation at the manufacturer or retrofitting
- Suitable to work with either mechanical or electric proportional valves
- A choice of drives:
  - belt or coupling drive (MEX 0831-11, 0831-10)
  - direct drive (MEX 0544)
- Motors 50 Hz and 60 Hz, for worldwide operation
- Integrated flame arresters at the in and outlet ensuring maximum safety
- Suitable also as flame trap in vapour recovery systems
- Various fitting positions possible
- Rotational direction independent of pump orientation
- Materials appropriate for applications with „E85"



BELT DRIVE

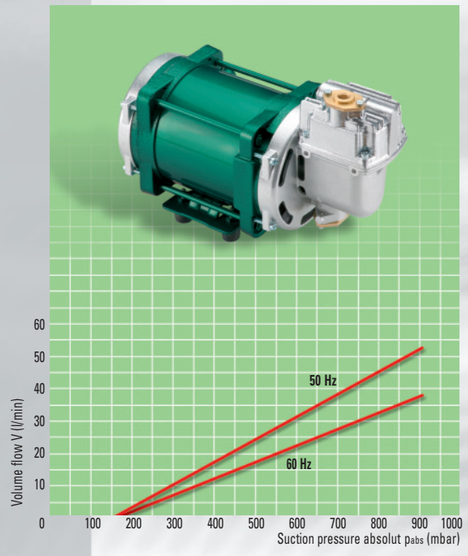
0831-10
0831-11

1. ATEX and TÜV Certificated
2. Oil- and maintenance free
3. Resistant to condensate and liquid
4. Rotation independent of pump orientation
5. Noise level <70 dB(A)

Type	Volume flow* V (l/min)	p_{absmin} (mbar)	Motor Power recommended (W)	Maximal allowable speed (1/min)	Dimensions L x W x H (mm)
0831-10	43	~ 150	150 (200)	2100	148 x 88 x 188
0831-11	44	~ 150	150 (200)	2300	148 x 88 x 188

Accessory: belt pulley (94 mm effective diameter)
Replacement pumps and motors on request.

Remarks:
V = volume flow at back pressure pe = 150 mbar suction pressure p_{abs} = 900 mbar Medium: Air
p_{abs} = absolute pressure L_S = noise level based on EN ISO 2151 and EN ISO 3744



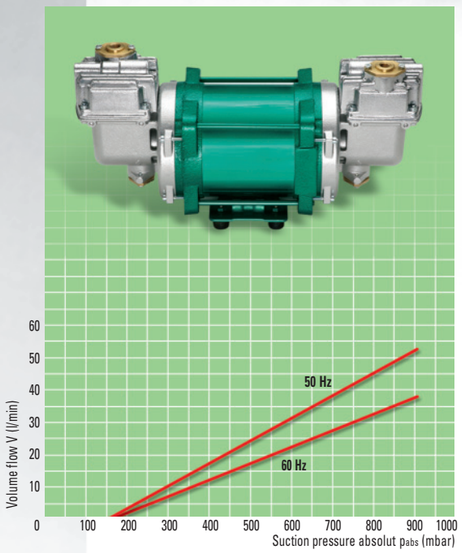
DIRECT DRIVE 1-CYLINDER

0544 1___

1. ATEX and TÜV Certificated
2. Oil- and maintenance free
3. Resistant to condensate and liquid
4. Rotation independent of pump orientation
5. Noise level <70 dB(A)
6. Protection class IP 10

Type	Volume flow* V (l/min)	p_{absmin} (mbar)	Relay (V)	Characteristic of the motors: Motor input P1 (W)	I_N (A)	U_N (V)	f (Hz)	Dimensions L x W x H (mm)
0544 1000	53	~ 150	24 DC	285-312	0,75	380-415	50	310 x 152 x 201
0544 1100	53	~ 150	non	285-312	0,75	380-415	50	310 x 152 x 201
0544 1200	53	~ 150	24 DC	440-480	2,20	200-240	50	365 x 152 x 201
0544 1250	53	~ 150	220-240 AC	310	1,35	230	50	315 x 152 x 201
0544 1300	53	~ 150	non	440-480	2,20	200-240	50	365 x 152 x 201
0544 1400	38	~ 150	24 DC	200-230	1,80	110-127	60	365 x 152 x 201
0544 1500	38	~ 150	non	200-230	1,80	110-127	60	365 x 152 x 201
0544 1700	53	~ 150	220-240 AC	285-312	0,75	380-415	50	310 x 152 x 201
0544 1800	38	~ 150	non	250	1,15	220	60	365 x 152 x 201

Remarks:
V = volume flow at back pressure pe = 150 mbar suction pressure p_{abs} = 900 mbar Medium: Air
p_{abs} = absolute pressure L_S = noise level based on EN ISO 2151 and EN ISO 3744
I_N = nominal current U_N = nominal voltage f = frequency



DIRECT DRIVE 2-CYLINDER

0544 2___

1. ATEX and TÜV Certificated
2. Oil- and maintenance free
5. Resistant to condensate and liquid
6. Rotation independent of pump orientation
7. Noise level <70 dB(A)
8. Protection class IP 10

Type	Volume flow* V (l/min)	p_{absmin} (mbar)	Relay (V)	Characteristic of the motors: Motor input P1 (W)	I_N (A)	U_N (V)	f (Hz)	Dimensions L x W x H (mm)
0544 2000	53	~ 150	24 DC	340-375	0,90	380-415	50	432 x 152 x 201
0544 2100	53	~ 150	non	340-375	0,90	380-415	50	432 x 152 x 201
0544 2200	53	~ 150	24 DC	660-720	3,00	220-240	50	487 x 152 x 201
0544 2300	53	~ 150	non	660-720	3,00	220-240	50	487 x 152 x 201
0544 2400	38	~ 150	24 DC	320-370	2,90	110-127	60	487 x 152 x 201
0544 2500	38	~ 150	non	320-370	2,90	110-127	60	487 x 152 x 201
0544 2700	53	~ 150	220-240 AC	340-375	0,90	380-415	50	432 x 152 x 201
0544 2800	38	~ 150	non	330	1,50	220	60	487 x 152 x 201

Remarks:
V = volume flow at back pressure pe = 150 mbar suction pressure p_{abs} = 900 mbar Medium: Air
p_{abs} = absolute pressure L_S = noise level based on EN ISO 2151 and EN ISO 3744
I_N = nominal current U_N = nominal voltage f = frequency

Highest Quality is Our Norm

Certified for global use

DÜRR TECHNIK is certified according to the QS-Management-System DIN EN ISO 9001:2000.

Approvals:

- as appliance and protection systems according to the directive 94/9/EG (ATEX)
- TÜV applicable system approvals

Please contact us for any further information concerning approvals and certificates. We will be pleased to be of assistance.
DÜRR TECHNIK – Your competent partner.

DÜRR TECHNIK

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