

FEATURES 特 徴

- ① **【耐久力大】** 振動部は、2枚の特殊合成ゴム製ダイヤフラム間に支持されたロッドが、左右に振動する構造で長期連続使用に耐えます。
- ② **【無給油】** 摺動部が全く無いので給油の必要がなく常に清潔な吐出気体を得ることができます。
- ③ **【高能率】** 電磁振動の構造であり機械的摺動部がないため、消費電力は極めて小さく高能力です。
- ④ **【小型強力】** 永久磁石に作用する電磁石を前後に2個使用し、一層バランスの良い完全均衡型振動機構を採用していますので小型で強力です。
- ⑤ **【低騒音】** 空気回路的に又振動系的に、防音構造を主眼として設計されており、ポンプ騒音は静かです。
- ⑥ **【平滑な流れ】** 吐出風量が非常に均一であり、脈動が少ないので、圧力・風量の平滑を要求される空気源に最適です。
- ⑦ **【簡単な保守】** メンテナンスフリーで安心して長期使用して頂けますが、万一ダイヤフラム等が破損した場合はパーツ部品がカセット式になっておりますので、簡単に交換できます。

HIBLOW®

1. Durability

The moving parts consist of an actuating rod supported by two special synthetic rubber diaphragms which vibrate laterally, permitting long-term continuous operation.

2. No Lubrication Necessary

There is no friction between moving parts and therefore no need for lubrication. An added advantage being that the exhausted air is always clean.

3. High Efficiency

Operation is based upon the principle of electromagnetic vibration which eliminates the need for sliding parts, thereby minimizing power consumption and offering high efficiency.

4. Compact and Powerful

"HIBLOW" air pumps incorporate two electromagnets, one to the front, the other to the rear, which act upon permanent magnets, providing perfectly-balanced vibration and allowing a compact but powerful device.

5. Low Noise

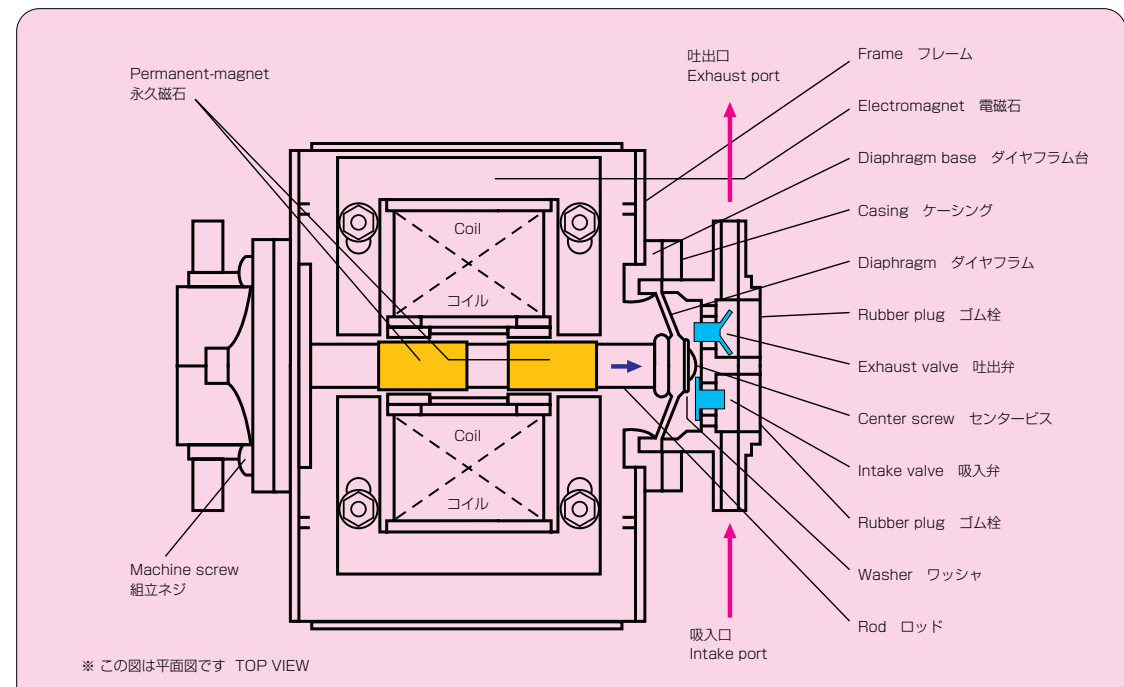
Sound insulation was of prime importance when designing the pneumatic circuit and vibrating section and as a result it is exceptionally quiet.

6. Smooth Air Flow

The exhaust rate is uniform and vibration minimal therefore it is ideally suited for applications which require consistent air pressure and supply.

7. Simple Maintenance

Apart from the simple replacement of some components, such as a broken diaphragm, long-term, maintenance-free operation is possible. Replacement parts come in a cassette.



図のように、交流電源をロッドに固定された永久磁石と対向する電磁石に通電すると、磁力作用により両磁石間で吸引・反発の力を受け、ロッドが図A、次に図Bの方向に移動します。ロッドは電源と同じ周波数で振動し、ケーシング内の容積変化と、弁の作用により圧縮送気を続けるわけです。

HIBLOW® 動作原理 Working Principle

When the alternating current is applied to the electromagnet as in the figure, above the actuating rod moves first in the direction of the arrow as shown in Fig. A and then in the direction of the arrow as shown in Fig. B, by the magnetic attraction and repellent forces exerted between the electromagnet and the permanent magnets attached to the rod. The rod vibrates at the same frequency as that of the power supply and changes the volume of the space enclosed between the casing and the diaphragm. Thus, the air intake, compression and exhaust can be performed through the valves.

