ANKERSMID AMP 416Ex

CHEMICALLY RESISTANCT DIAPHRAGM PUMP
ATEX approved

* Picture may vary

Principle

The basic construction of the **AMP d**iaphragm gas sampling Pumps is simple. An elastic diaphragm is moved up and down by an eccentric (see illustration). On the down-stroke it draws the air or gas being handled through the inlet valve. On the up-stroke the diaphragm forces the medium through the exhaust valve and out of the head. The compression chamber is hermetically separated from the drive mechanism by the diaphragm. The pumps transfer, evacuate and compress completely oil-free.

Application

Despite its small size, the chemically resistant **AMP 416Ex** diaphragm pumps offer a high level of performance, at an excellent price performance ratio. The **AMP 416Ex** is used for the transportation of sample gas in sample conditioning systems in the chemical industry, for environmental applications, and in production technology; some application examples are sampling gases from the ambient environment, exhaust gases and smoke analysis.

The **AMP 416Ex** offers easy installation and adaptation to a variety of processes.

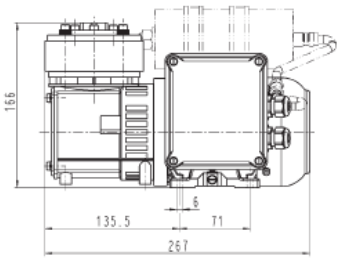
The **AMP 416Ex** series and its pump drives are explosion-proofed according to 94/9/EC (ATEX).

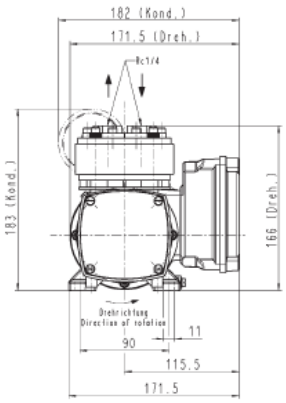
- **Pure transferring, evacuation and compression of air, gases and vapours**
- **No contamination of the media due to oil-free operation**
- **Explosion-proofed to ATEX**
- **Chemically-resistant models transferring high aggressive and corrosive gases and vapours**
- **High level of gas tightness: approx. 6 x 10-3 mbar x l/s**
- **Very quiet and little vibration**
- **Cool running motor even when in constant use**
- **Can operate in any installed position**

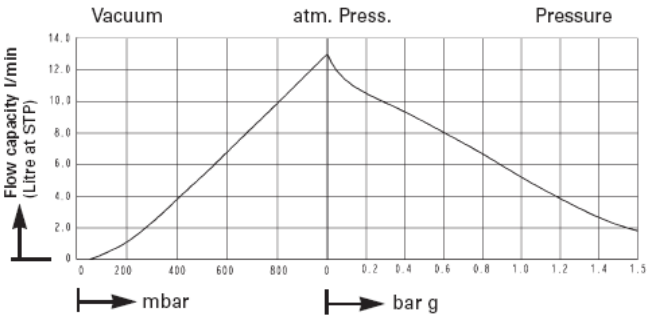
Chpt 6-4.1

Dimensions and performance characteristics

Dimensions in mm (all dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V)







DIAPHRAGM PUMPS CONFORMING TO 94/9/EC (ATEX): FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

ATEX is the new European standard for explosion protection. The ATEX directive describes what equipment and work environment is allowed in an environment with an explosive atmosphere. The legal requirements are set out in the directive 94/9/EC (also known as ATEX). In Germany this directive was passed into national law on March 1st, 1996. As of July 2006, all organizations in EU must follow the directives.

Compared to the previous legal requirements, the scope of the regulations has now been extended: whereas the old regulations were concerned with electrical equipment, mechanical equipment is now also included.

For pumps, this means that besides the drive section (drive motor, an electrical device), the working section (pump part, a non-electrical device) now also fall within the regulations.

The explosion prevention and protection requirements depend on the specific equipment group and the relevant equipment category.
Rather than giving concrete requirements, the directive formulates the assurance of protection levels, thus placing greater liability than before on the product manufacturer.