

General

JESCO diaphragm metering pumps need little maintenance. The standard version of the pump integrates a separating chamber function. For increased requirements, a second separating chamber can be added according to MB 1 28 01. Thus a better protection of the pump gear unit is ensured. In both versions, any leakage is drained off through a drainage pipe. For electrical evaluation, an additional leakage probe can be installed.

In the case of a diaphragm failure due to wear, a contact between the medium and the atmosphere cannot be excluded. As a result, the environment might be endangered or molested inadmissibly.

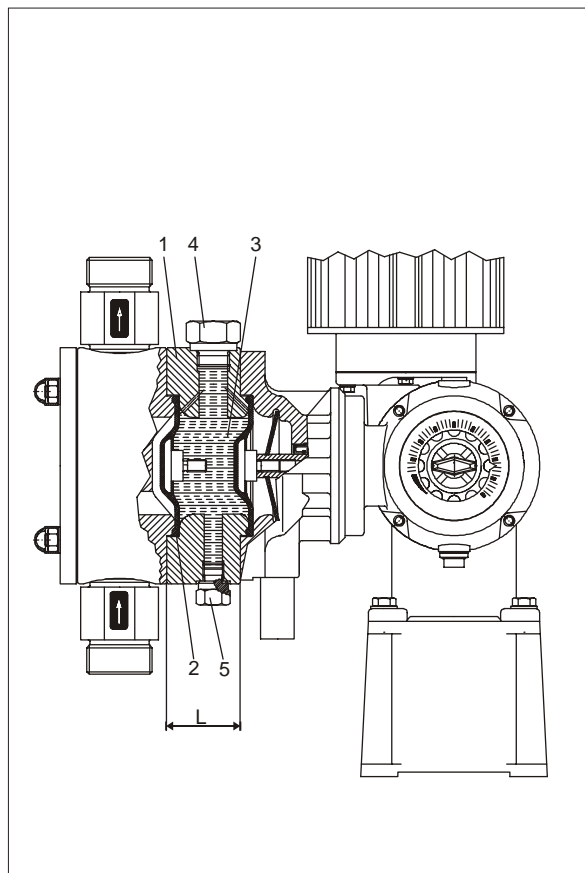
To avoid this, a hermetically sealed double-diaphragm system has been developed. It can be integrated in all diaphragm pumps of the types MEMDOS E/DX and MR and is adapted to the relevant capacities and operating pressures.

Construction and Function

The double-diaphragm system is fixed between the metering head and the diaphragm flange of the pump. The housing (1) is of plastic. It is equipped with a filling socket (4) and a drain plug (5). The second diaphragm (2) separates the medium from the glycerin-filled working chamber (3). If the chamber between the two diaphragms does not contain air, the separating diaphragm follows the movement of the main or operating diaphragm. A failure of the separating diaphragm (2) does *not* affect the pump function, the medium is only mixed with the glycerin. If the operating diaphragm fails due to wear, only glycerin escapes from the drainage pipe of the diaphragm flange; the medium is hermetically sealed by the separating diaphragm.

Leakage Alarm

On the basis of conductivity measurement, the double-diaphragm system can be equipped with a leakage probe. If the glycerin is mixed with the medium, its conductivity changes. This change is detected by a two-rod electrode and can be evaluated electrically. A level relay (see e.g. MB 4 43 00) is required for this purpose.



Selection Table

Double-Diaphragm System			
Diaphragm- \varnothing	L (mm)	Part No.	
		MR / ZMR	E/DX
$\varnothing 64$	39,0	-	12835189
$\varnothing 90$	47,5	12833522	12835251
$\varnothing 120$	47,5	12833523	12833523
$\varnothing 150$	47,5	12833524	12835348
$\varnothing 185$	47,5	12833525	-

Leakage probe as accessory for all sizes - Part Number: 33581

Note:

Due to the compressibility of the transmitting medium, the metering capacity may be 10 % lower (depending on the back-pressure).