

Easy dosing with large pressure fluctuations

Pulsation damper PDM/PDP



Easy dosing

Failure to take into account the typical acceleration and delay of the media conveyed by the dosing pumps can result in considerable faults. Too great an acceleration on the suction side can result in cavitation and thus the stoppage of the suction flow. Long lines on the supply side can experience large forces which can damage the dosing pump. Damaging vibrations in the pipe line can cause destruction. This can result in unpleasant noises. Order a flow meter to ensure good functioning in relation to equal flow. Additional work is required before the float flow meter can be installed on the discharge side of the dosing pumps, as the float would rise and fall violently.

The function is based on an energy-releasing compression and expansion of a gas cushion. A proportion of the media to be transported can be saved during the pressure increase and released to the pipe network when the pressure falls. We differentiate between a pulsation damper with and without a dividing membrane. In pulsation dampers without a dividing membrane, the medium has immediate contact with the gas cushion formed by the trapped compressed air. After start-up, this gas cushion is compressed to the volume to be dampened. As the compressed air is gradually dissolved in the medium, it requires periodic aeration in a pressureless state. This avoids the disadvantage when using pulsation damper with a dividing membrane. The damping gas cushion is separated from the medium conveyed an elastic diaphragm and thereby protected against absorption.

Functions

- Nominal volume 180 – 5600 ml
- Integration in the pressure line via a T-piece possible
- Also for chemically-aggressive media (PTFE diaphragm)
- Nitrogen filling as a damping gas cushion
- Pre-tension pressure pre-set
- Optional pressure gauge

Technical data

PDM		150	350	650	950	1400	2600	5600
Stroke volume*	ml/stroke	24	50	100	150	230	420	900
Permissible operating pressure	bar	180		50	40		30	40
Pre-tension pressure	bar	Specify with orders						
Temperature	EPDM	°C						
	FPM	°C						
Weight	kg	1.8	3.6	2.5	4.3	4.6	5.3	10

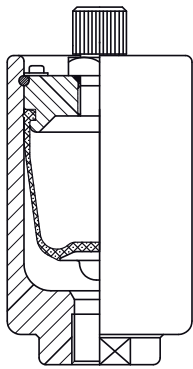
*Applies for the residual fluctuation +/- 10% of the nominal pressure with simple pumps

PDP		150	300	700	1400	2600
Stroke volume*	ml/stroke	24	48	120	230	420
Permissible operating pressure	bar	20				
Pre-tension pressure	bar	Specify with orders				
Temperature	FTFE	°C				
Weight	kg	1.6	2.2	2.7	7.1	11.5

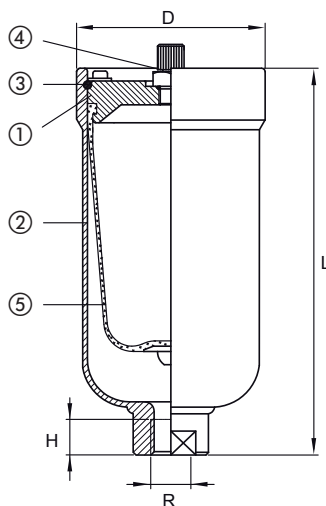
*Applies for the residual fluctuation +/- 10% of the nominal pressure with simple pumps

Dimensions

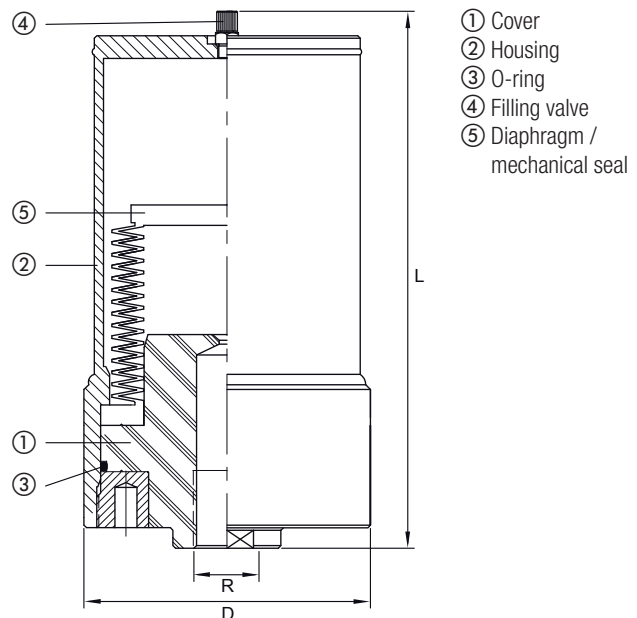
PDM 150 and 350



PDM 650 – 5600



PDP 150 – 2600



- ① Cover
- ② Housing
- ③ O-ring
- ④ Filling valve
- ⑤ Diaphragm / mechanical seal

PDM	150	350	650	950	1400	2600	5600
R	G1/2 i		G3/4 i		G1 i	G1 1/2 i	
D	70	85	90	110	140	170	
H	14	16	20	25	27	30	
L	118	161	205	200	245	295	414

All dimensions in mm

PDP	150	300	700	1400	2600
R	G1/2 i		G3/4 i		G1 i
D	70	84	105	123	170
L	178	234	250	276	306

All dimensions in mm