

Product Information Pulsation Damper PDM/PDP

Avoiding the Transfer of Pressure Peaks

Pressure fluctuations in hydraulic pipe networks and fittings cause irregular operation in downstream consumers and, in the case of high amplitude fluctuations, can even irreparably damage the pipe networks or tear them out of their anchoring. The situation becomes particularly critical when a pulsation frequency is in the resonance range of the network. Left undamped, an increase in the pressure peaks can result in unforeseeable damage.

Piston and diaphragm dosing pumps naturally produce pulsations where the intensity increases with the line length. The smaller the line diameter, the larger the pressure peaks. For this reason, pulsation dampers should be included in the planning of dosing systems, especially in connection with rigid piping (no flexible hose). Pulsation dampers are as simple as they are effective in balancing increasing pressures to a safe level.

Buffer Effect

The function works on the principle of the medium compressing a nitrogen cushion, thus storing energy. As the pressure increases (delivery stroke), a part of the delivered medium is stored and then released into the piping system as the pressure decreases (during the suction stroke).

In Short

- Also suitable for chemically aggressive media (PTFE diaphragm)
- Nitrogen filling
- Preset preload pressure
- Pressure gauge (optional)



Please note that the max. working pressure/preload pressure is $\leq K$
The preload pressure must be specified when ordering.

Technical Data

Type	Part No.	Vol [l]	PN [bar]	Material		Connection R	D [mm]	L [mm]	H [mm]	Weight [kg]	K	Temperature [°C]	Gas
				Housing	Diaphragm								
PDM 150	12760066	0.15	180	1.4404 (AISI 316)	EPDM	G 1/2" i	70	118	14	1.8	2.5	-30 ... +130	N ₂
	FPM				-10 ... +170								
PDP 150	12760088	20	PTFE		64		180	-	2	-20 ... +160			
PDP 300	12760089		78		240		-						
PDM 350	12760076	0.35	130		EPDM		80	162	16	2.6	3	-30 ... +130	
	FPM				-10 ... +170								
PDM 650	12760080	0.65	50		EPDM	G 3/4" i	90	205	20	2.5	3.5	-30 ... +130	
	FPM				-10 ... +170								
PDP 700	12760090	0.70	20		PTFE		98	225	-	4.9	2	-20 ... +160	
	PDM 950				12760082		0.95	40	EPDM			110	
PDM 1400	12760083	FPM	-10 ... +170										
PDM 1400	12760084	1.4	20		EPDM		112	-	-	6.6	2	-30 ... +130	
	PDP 1400				12760091	PTFE						-10 ... +170	
PDM 2600	12760086	2.6	30		EPDM	G 1" i	140	295	27	5.3	3.5	-30 ... +130	
	FPM				-10 ... +170								
PDP 2600	12760092	20	PTFE		158		385	-	12.5	2	-20 ... +160		
	PDM 5600		12760093		5.6		40	EPDM			170	414	
FPM	-10 ... +170												

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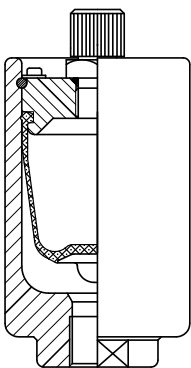
Temperature-Nominal Pressure (PN) Characteristic

Diaphragm	Medium temperature [°C]	Nominal pressure (PN) adaptation factor
EPDM or FPM	50	0.95
	80	0.90
	130	0.82
	170	0.74
PTFE	-	-

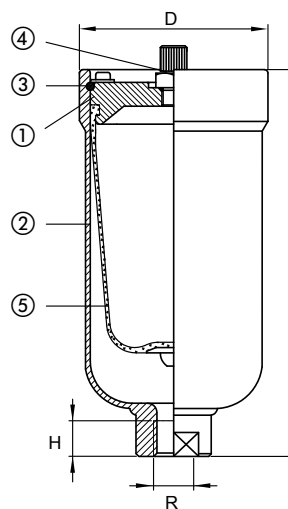
Accessories

Description	Order No.	
Filler valve for air	12750032	
Filler and test fitting	0 ... 25 bar	12750030
	0 ... 100 bar	12750031
	0 ... 250 bar	12750033
	0 ... 250 bar	12750033
Pressure display (pressure gauge)	0 ... 16 bar	12750034
	0 ... 25 bar	12750035
	0 ... 40 bar	12750036
	0 ... 100 bar	12750037
	0 ... 250 bar	12750038

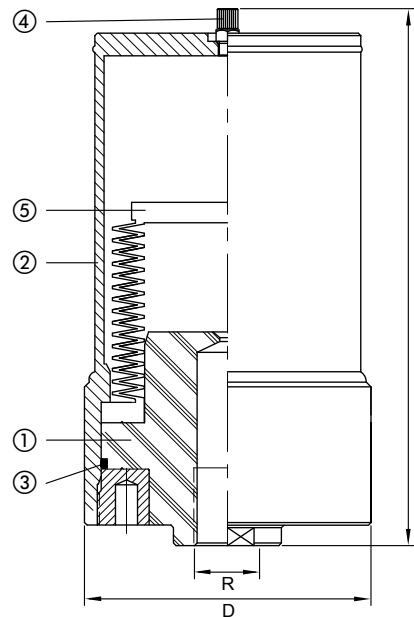
Dimensioned Drawings



PDM 150 ... 350



PDM 650 ... 5600



PDP 150 ... 2600

- ① Cover
- ② Housing
- ③ O-ring
- ④ Filler valve
- ⑤ Diaphragm/gaiter