PULSATION DAMPER MODEL PA166

Specification

Pulse damper is a device for eliminating pipeline pulsation and an accessory for metering pump. It can smooth the pipeline pulsation and water hammer caused by metering pump, diaphragm pump, etc. The medium is isolated by a corrosion resistant diaphragm, the pipeline pulsation is smoothed by changing of the volume of the gas chamber.
Shell Material: PVC, PP, PVDF, SS304, SS316
Diaphragm Material: FPM, PTFE

Functional characteristics

1. Reduce the harm of water hammer to the system
2. Reducing the peak value of velocity fluctuation
3. Protect pipelines and valves from pressure fluctuations
4. Improve the working environment and performance of metering pump
5. Allow the system to use smaller diameter pipe and reduce costs
6. Cooperating with back pressure valve can make the pressure fluctuation of pipeline close to zero.
7. Reducing system energy consumption

Volume calculation

Pump flow per hour ÷ 60 ÷ pump stroke per minute x 15 = minimum volume required by damper
The minimum volume needed to reduce 90% pulse can be obtained by multiplying the metering capacity (ml) of each stroke x 15.

Working principle

According to Boyle's law P1V1 = P2V2, the volume of gas is inversely proportional to the pressure of gas, and the pipeline pulsation is smoothed by changing the volume of gas. For the system with sinusoidal curvilinear flow velocity, in peak time, the volume of the chamber decreases, and the impulse damper absorbs the excess flow liquid; in trough time, the volume of the chamber increases, releasing the stored liquid, so as to achieve the effect of smooth pulsation.

Dimension Sheet

Vol (L)	H (mm)	D (mm)	Size	Mpa	Connect
0.35	235	Φ142	DN15	1.6	F BSPT 1/2"
0.6	240	Φ174	DN20	1.6	F BSPT 3/4"
1.0	310	Φ210	DN25	1.6	F BSPT 1"
2.0	330	Φ280	DN32	1.6	F BSPT 1 1/4"
4.0	370	Φ306	DN40/ DN50	1.6	F BSPT1 1/2"、2"