



Ligao Pulse Damper(Empty Air/Diaphragm/Bladder Type)

★ Introduction

Safety Valve Series:

Pulse damper, also known as pulsation damper, pulsation buffer, is a common element to eliminate the pulsation, is the pump must be equipped with measuring pump accessories. The pulsation damper can smooth the pipeline pulsation and the systematic water hammer phenomenon caused by the plunger pump and the diaphragm pump. Common styles of damper: empty air type, diaphragm type, bladder type.

★ Empty Air Dampr

Empty air damper is an sealing tank, relying on the air in the medium to directly compress the air to achieve the effect of cushioning. The structure of the air damper is simple and the price is relatively low. The biggest disadvantage is that the compressed air will gradually dissolve into the medium, resulting in less and less compressed air. The medium inside the empty empty row from the device to ensure the internal space, so the maintenance is slightly troublesome during use, and it is suitable for some systems that are not too high in the cushioning requirements.

Easy method of volume selection: The volume (milliliter) of each rushing journey is multiplied by 26, that is, the minimum volume that can reduce the pulse of 90%.

Body Material: PVC/PVDF/SS304/SS316

Capacity: 0.5-10L(Standard), bigger size on request

Working Pressure: 0.1-1Mpa(PVC) ; 0.1-31.5Mpa(Stainless Steel)

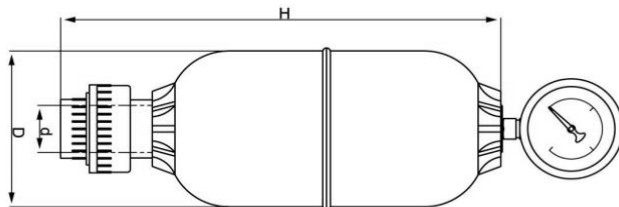
Size: DN15;DN20;DN25;DN32;DN40;DN50

Connection type: Union/Female Thread/Flange



★ Parameters

Empty Air Damper (PVC)



Model	Capacity(L)	Size	d(mm)	D(mm)	H(mm)	H(mm)(With Diaphragm)	Max Pressure MPa
LGMK-0.6	0.6	DN15	20	85	266	330	1.0
LGMK-0.9	0.9	DN20	25	100	266	330	1.0
LGMK-1.2	1.2	DN25	32	110	290	351	1.0
LGMK-2.2	2.2	DN32	40	130	380	445	1.0
LGMK-3.2	3.2	DN40	50	140	398	465	1.0
LGMK-5.0	5.0	DN40	50	140	560	625	1.0
LGMK-10	10	DN50	63	140	925	1000	1.0

Empty Air Damper (SS304/SS316)

Capacity(L)	Material	Model	D(mm)	H(mm)	Connection
0.5L	SS304/316	BXMZ-KS0.5/2.5(5.0)	89	195	RC 1/2"
1.0L	SS304/316	RXMZ-KS1.0/2.5(5.0)	108	215	RC 3/4"
2.0L	SS304/316	RXMZ-KS2.0/2.5(5.0)	108	380	RC 1"
3.0L	SS304/316	RXMZ-KS3.0/2.5(5.0)	140	355	RC 1-1/4"
4.0L	SS304/316	RXMZ-KS4.0/2.5(5.0)	140	440	RC 1-1/4"
5.0L	SS304/316	RXMZ-KS5.0/2.5(5.0)	159	460	RC 1-1/4"

★ Diaphragm Damper

Diaphragm damper is divided into upper and lower shells. The middle is separated by composite PTFE membrane. It is the most commonly used pulse damping device. The biggest advantage is that the diaphragm is separated from the liquid in the pipeline to facilitate maintenance. Under the appropriate selection and pressure conditions, it can eliminate more than 90% of the pulse. Method of volume selection: The volume (milliliter) of each rushing journey is multiplied by 10, that is, the minimum volume that can reduce the pulse of 90%.

Body Material: PVC/PVDF/SS304/SS316

Diaphragm Type Diaphragm Material: Composite PTFE/EPDM

Capacity: 0.35-6L(Standard), bigger size on request

Working Pressure: 0.1-1Mpa(PVC) ; 0.1-2.5Mpa or 0.1-10Mpa(Stainless Steel)

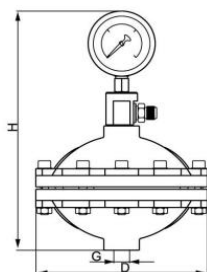
Size: DN15;DN20;DN25;DN32;DN40;DN50

Connection type: Union/Female Thread/Flange



★ Parameters

Diaphragm Damper (PVC)



Model	Capacity(L)	H(mm)	D(mm)	Size	Max Pressure MPa	Connection
LGMZ-0.35	0.35	215	140	DN15	1.6	RC 1/2"
LGMZ-0.6	0.6	235	171	DN20	1.6	RC3/4"
LGMZ-1.0	1.0	260	205	DN25	1.6	RC1"
LGMZ-1.5	1.5	308	230	DN25	1.6	RC1"
LGMZ-2.0	2.0	313	255	DN32	1.6	RC1 1/4"
LGMZ-4.0	4.0	354	301	DN40/ DN50	1.6	RC1 1/2", 2"

Diaphragm Damper (SS304/SS316)

Model	Capacity (L)	Max Pressure (MPa)	H (MM)	D (MM)	Connection	Body Material
RXMZ-S0.15/2.5	0.15	2.5	207	124	RC1/2"	304/316
RXMZ-S0.35/2.5(5.0)	0.35	2.5	227	140	RC 1/2"	304/316
RXMZ-S0.35/10	0.35	10	227	147	RC 1/2"	304/316
RXMZ-S0.6/2.5(5.0)	0.6	2.5	245	170	RC 3/4"	304/316
RXMZ-S0.6/10	0.6	10	245	177	RC 3/4"	304/316
RXMZ-S1.0/2.5(5.0)	1	2.5	273	215	RC 1"	304/316
RXMZ-S1.0/10	1	10	273	218	RC 1"	304/316
RXMZ-S2.0/2.5(5.0)	2	2.5	320	260	RC 1-1/4"	304/316
RXMZ-S4.0/2.5(5.0)	4	2.5	340	310	RC 1-1/2"	304/316
RXMZ-S6.0/2.5(5.0)	6	2.5	345	352	RC 2"	304/316
RXMZ-S10/2.5	10	2.5	400	418	RC 2"	304/316

★ Bladder Damper

Bladder damper is separated from airbags, high sensitivity of airbags, good pulse effect, and can withstand high pressure. During the work, the liquid in the pipeline compressed the airbag, the airbag contracted, and then expanded to compensate for the pressure loss of the pipeline, thereby achieving a cushioning effect. Compared with the diaphragm, the bladder type damper has higher sensitivity, better buffer effect, and the volume can be much larger than the diaphragm. However, because its airbag material is generally made of rubber, its use range is not widely used.

Method of volume selection: The volume (milliliter) of each rushing journey is multiplied by 10, that is, the minimum volume that can reduce the pulse of 90%.

Body Material: PVC/SS304/SS316

Bladder Type Airbag Material: FKM/EPDM/NBR/Butyl

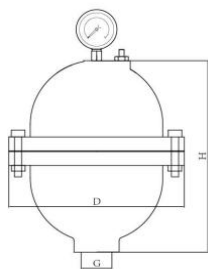
Capacity: 0.35-16L(Standard), bigger size on request

Working Pressure: 0.1-1Mpa(PVC) ; 0.1-2.5Mpa or 0.1-5Mpa,0.1-10Mpa,0.1-20Mpa,0.1-31.5Mpa(Stainless Steel)

Connection type: Female Thread/Flange



★ Parameters
Bladder Damper (PVC)



Model	Capacity	H(mm)	D(mm)	Size	Connection
LGMQ-0.35	0.35	192	140	DN15	Thread/Flange
LGMQ-0.6	0.6	220	140	DN20	Thread/Flange
LGMQ-1.0	1.0	220	163	DN25	Thread/Flange
LGMQ-1.5	1.5	274	163	DN25	Thread/Flange
LGMQ-2.0	2.0	300	200	DN32	Thread/Flange
LGMQ-4.0	4.0	288	245	DN40	Thread/Flange
LGMQ-5.0	5.0	385	245	DN40/50	Thread/Flange
LGMQ-6.0	6.0	495	245	DN40/50	Thread/Flange
LGMQ-12.0	12.0	592	305	DN50/65/8	Thread/Flange

Bladder Damper (SS304/SS316)

Model	Capacity	Max Pressure	H	D	Connection	Body
RXMZ-QS0.4/2.5(5.0)	0.4L	2.5/5.0	88	270	RC 1/2"	304/316
BXMZ-QS0.63/2.5(5.0)	0.63L	2.5/5.0	88	325	RC 3/4"	304/316
RXMZ-QS1.0/2.5(5.0)	1.0L	2.5/5.0	106	325	RC 1"	304/316
RXMZ-QS1.6/2.5(5.0)	1.6L	2.5/5.0	138	380	RC 1-1/4"	304/316
RXMZ-QS2.5/2.5(5.0)	2.5L	2.5/5.0	138	440	RC 1-1/4"	304/316
RXMZ-QS4.0/2.5(5.0)	4.0L	2.5/5.0	138	545	RC 1-1/2"	304/316
RXMZ-QS6.3/2.5(5.0)	6.3L	2.5/5.0	138	720	RC 1-1/2"	304/316
RXMZ-QS10/2.5(5.0)	10L	2.5/5.0	219	560	RC 2"	304/316
RXMZ-QS16/2.5(5.0)	16L	2.5/5.0	219	775	RC 2-1/2"	304/316
RXMZ-QS0.4/*	0.4L	10/20/31.5/40	89	250	M27*2	304/316
RXMZ-QS0.63/*	0.63L		89	320	M27*2	304/316
RXMZ-QS1.0/*	1.0L		114	315	M27*2	304/316
RXMZ-QS1.6/*	1.6L		152	355	M42*2	304/316
RXMZ-QS2.5/*	2.5L		152	420	M42*2	304/316
RXMZ-QS4.0/*	4.0L		152	530	M42*2	304/316
RXMZ-QS6.3/*	6.3L		152	700	M42*2	304/316
RXMZ-QS10/*	10L		219	660	M60*2	304/316
RXMZ-QS16/*	16L		219	870	M60*2	304/316