PRODUCT INFORMATION

PULSATION DAMPER

INSPIRED. SOLUTIONS. FOR CUSTOMERS.

PULSATION DAMPER

sera diaphragm pulsation dampers are crucial to the safety of dosing units with oscillating positive displacement pumps. By reducing the acceleration pressure of the medium, they ensure a constant pump capacity while also protecting pipes and other components from overpressure. Installing a pulsation damper makes it possible for multiple pumps to be connected together, and avoids damage caused by vibration and associated interference.

RANGE OF APPLICATIONS

Fluid media with corrosive, malodorous, radioactive, flammable, viscous or toxic properties.

DESIGN

sera diaphragm pulsation dampers have a diaphragm which separates the gas cushion (yellow) from the medium (blue), preventing absorption and discharge.

INSTALLATION

The pulsation damper should be installed right next to the dosing pump, either in a branch line or fitted directly into the dosing pipe, depending on the model of pulsation damper.

ADVANTAGES AT A GLANCE

- Ease of use
- Low maintenance
- Long service life
- Any installation position
- Vibration and noise damping

HOW IT WORKS

Pressure from the gas cushion (yellow) dampens the diaphragm movement, which corresponds to the pulsation of the medium. This allows the pulsation to be reduced and an even flow rate to be achieved.

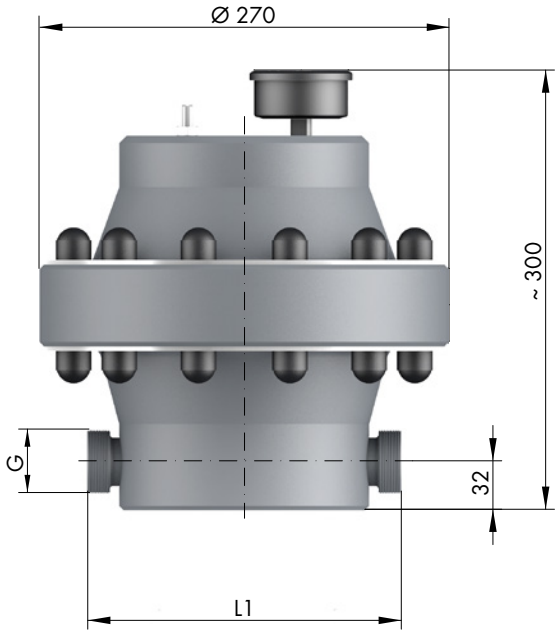
Operating conditions [2]					
Min. temperature (for water)		°C	+2	+2	+2
Max. temperature (for water)		°C	+20	+30	+40
Max. permissible operating pressure [1]	PP	bar	10	9	7
Max. permissible operating pressure [1]	PVC-U	bar	10	8	5
Max. permissible operating pressure [1]	PVDF [2]	bar	10	9	7

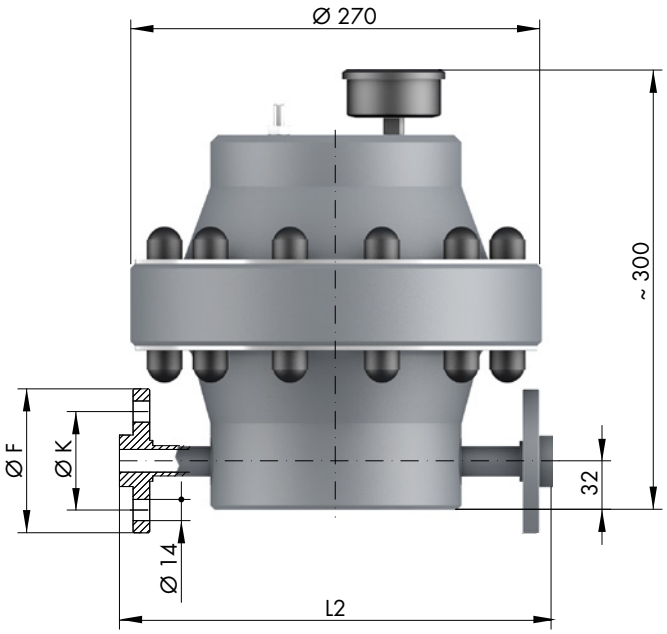
[1] within temperature range
[2] not for 810.1

TECHNICAL SPECIFICATIONS / DIMENSIONS

			713.1		
Nominal width		DN	15	20	25
Max. permissible operating pressure		bar	10	10	10
Content		Litre	3	3	3
Weight [2]					
Empty weight	PP	kg	6,5	6,5	6,5
Empty weight	PVC-U	kg	9,0	9,0	9,0
Empty weight	PVDF [1]	kg	9,0	9,0	9,0

[1] Upper part made of PVC-U
[2] Standard design (threaded connector)





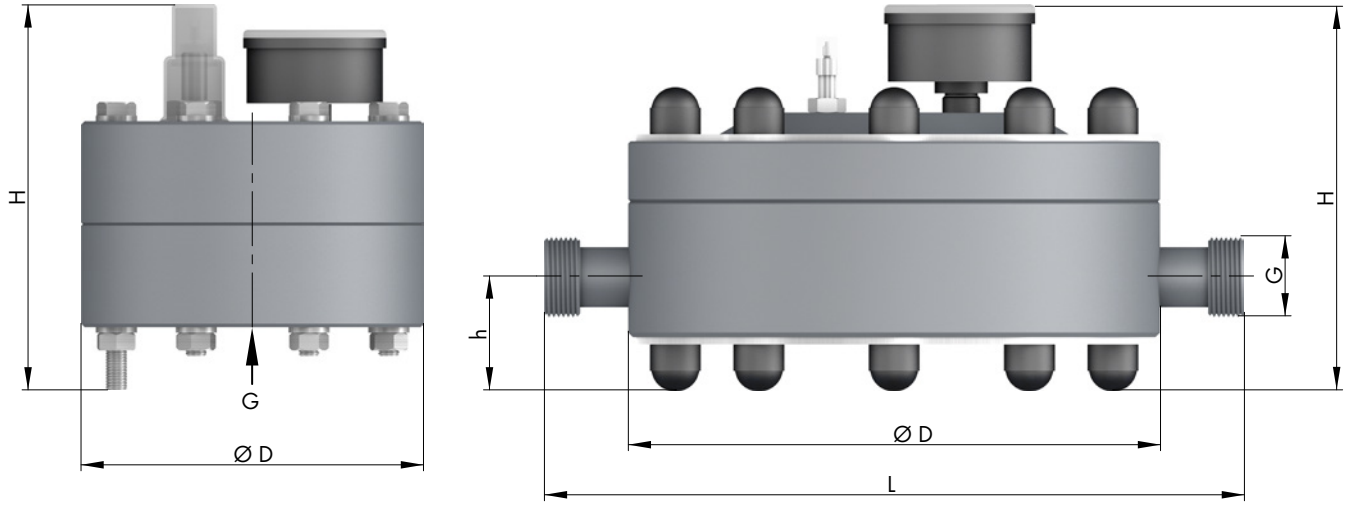
Threaded connector		713.1		
DN Nominal width	15	20	25
G Connection thread	G1	G1¼	G1 ½
L1 PVC-U	213	207	235
L1 PP	263	215	243
L1 PVDF [2]	255	215	243
Loose-type flange connector acc. to DIN2501		**713.1**	
DN Nominal width	15	20	25
F	95	105	115
K	65	75	85
L2 PVC-U	285	285	285
L2 PP	285	285	285

(Dimensions in mm) [2] Upper part made of PVC-U

TECHNICAL SPECIFICATIONS / DIMENSIONS

			720.1	721.2	722.1	723.1
Nominal width		DN	5	10	15	20
Max. permissible operation pressure		bar	10	10	10	10
Content		Litre	0,025	0,14	0,32	0,86
Weight						
Empty weight	PP	kg	0,9	3,5	5,0	8,0
Empty weight	PVC-U	kg	0,9	4,5	6,5	11,5
Empty weight	PVDF [1]	kg	1,0	5,0	7,0	13,0

[1] Upper part made of PVC-U

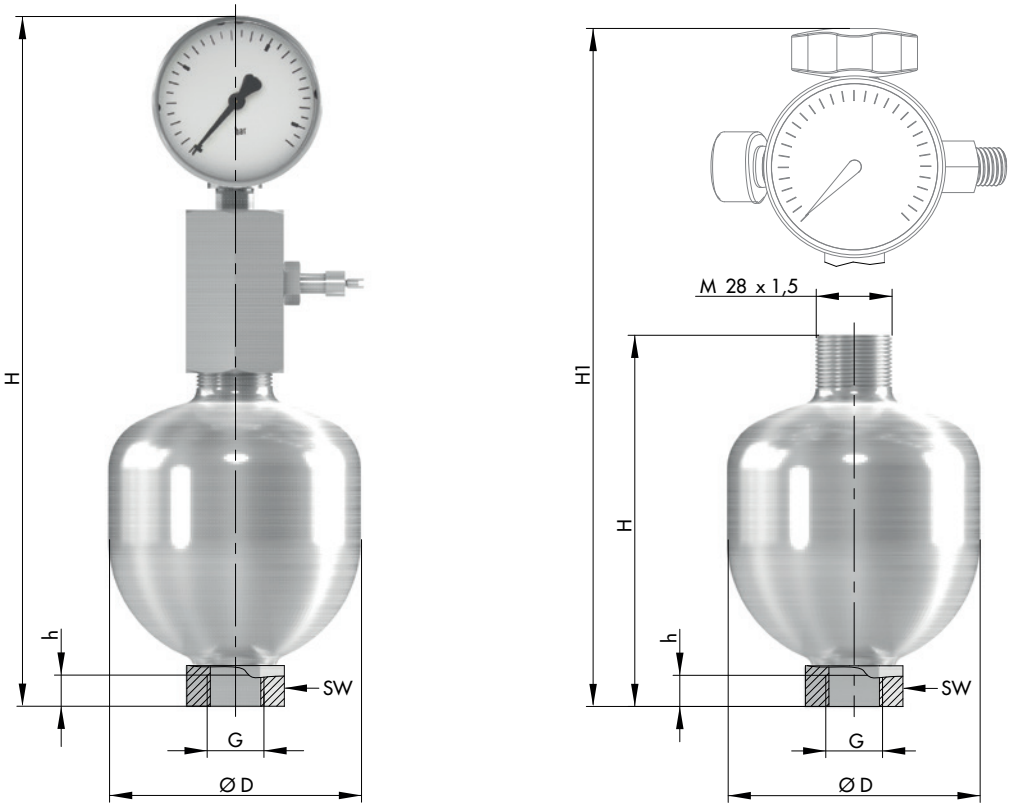


	720.1	721.2	722.1	723.1
DN Nominal width	5	10	15	20
G Connection thread	G½	G¾	G1	G1¼
D	100	180	222	280
H	115	165	180	211
h	–	45	48	46
L	–	250	292	330

(Dimensions in mm)

TECHNICAL SPECIFICATIONS / DIMENSIONS

		810.1-...							
		0.16/10	0.32/10	0.75/10	2.0/10	0.16/180	0.32/160	0.75/140	2.0/100
Max. operating pressure	bar	10	10	10	10	180	160	140	100
Volume	Litres	0.16	0.32	0.75	2	0.16	0.32	0.75	2
Empty weight 1.4571	kg	0.8	1.3	2.8	4.0	0.8	1.3	2.8	4.0



		810.1-...							
		0.16/10	0.32/10	0.75/10	2.0/10	0.16/180	0.32/160	0.75/140	2.0/100
G	Connection thread	G½	G½	G½	G¾	G½	G½	G½	G¾
D		74	93	212	160	74	93	212	160
H	PP [1]	244	257	288	338	–	–	–	–
H	1.4571 [1]	230	243	274	324	124	137	168	218
H1	Optional	–	–	–	–	225	238	268	319
h		14	14	14	18	14	14	14	18
SW		30	30	41	46	30	30	41	46

(Measurements in mm)

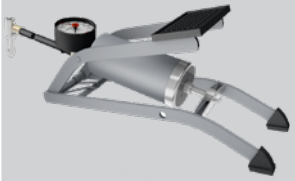
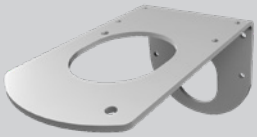
[1] Pressure gauge material

MATERIALS

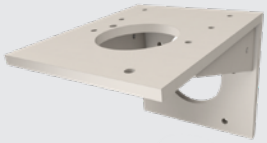
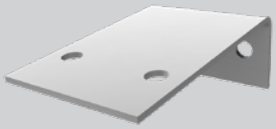
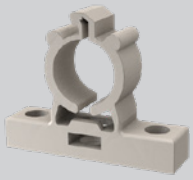
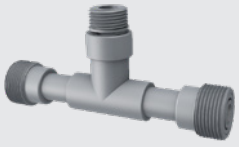
		713.1	720.1	721.2	722.1	723.1	810.1-0,16/10	810.1-0,32/10	810.1-0,75/10	810.1-2,0/10	810.1-0,16/100	810.1-0,32/160	810.1-0,75/140	810.1-2,0/100
Pulsation dampfer	PVC-U	■	■	■	■	■								
	PP	■	■	■	■	■								
	PVDF	■	■	■	■	■								
	1.4571						■	■	■	■	■	■	■	■
Seals	EPDM	■		■	■	■								
	FPM	■		■	■	■								
	FEP [1]			■	■	■								
Diaphragm	EPDM	■												
	FPM	■					■	■	■	■	■	■	■	■
	PTFE		■						■	■			■	■
	PTFE-faced			■	■	■								
	Butyl						■	■	■	■	■	■	■	■

[1] only with pulsation dampfer of PVDF

ACCESSORIES

Illustration	Name	Material	Article no.	713.1	720.1	721.2	722.1	723.1	810.1-.../10	810.1...
	Filling pump FLP2		9009396	■	■	■	■	■	■	
	Bracket	1.4301	90010914	■						
	Bracket	Coloured steel	90010915	■						

ACCESSORIES

Illustration	Name		Material	Article no.	713.1	720.1	721.2	722.1	723.1	810.1-.../10	810.1...
	Bracket		PP	90010913	■						
	Bracket		1.4301	90011238		■					
	Bracket		PP	90011722					■		
	Retaining clamp d16		PP	90010649		■					
	Retaining clamp d25		PP	90010651			■	■			
	Connection adapter G3/4		PVC-U / EPDM	90025079							
			PVC-U / FPM	90021733							
			PP / EPDM	90038083		■					
			PP / FPM	90038082							
			PVDF / FEP								
	Filling device / pressure gauge Copper alloy measuring system		Plastic	37600675						■	
	Filling device / pressure gauge Copper alloy measuring system Glycerine-damped manometer		Stainless steel	37600438							
	Filling device / pressure gauge Copper alloy measuring system	0-25 bar		37601674							
		0-100 bar		37601673							■
		0-250 bar		30066005							

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