

# 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 <sup>2)</sup>

Min. temperature (for water)	°C	+2	+2	+2
Max. temperature (for water)	°C	+20	+30	+40
Max. permissible operating pressure <sup>1)</sup>	PP bar	10	9	7
Max. permissible operating pressure <sup>1)</sup>	PVC-U bar	10	8	5
Max. permissible operating pressure <sup>1)</sup>	PVDF <sup>2)</sup> bar	10	9	7

<sup>1)</sup> within temperature range

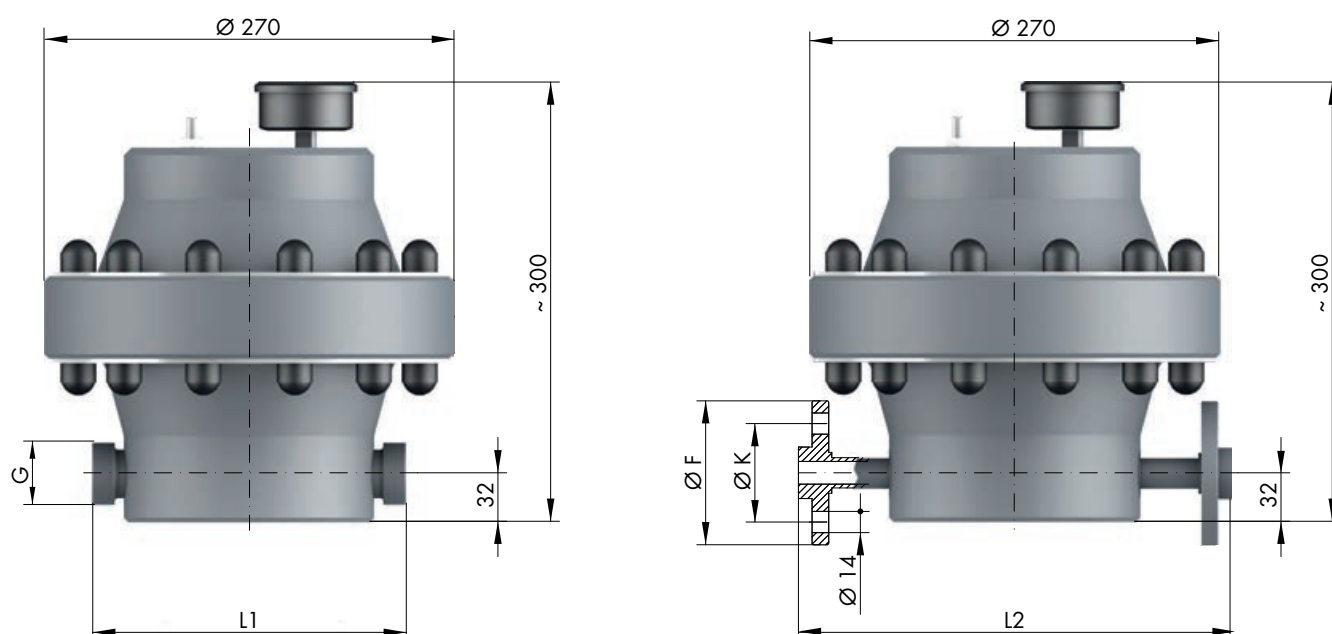
<sup>2)</sup> not for 810.1

# TECHNICAL SPECIFICATIONS / DIMENSIONS

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

<sup>1)</sup> Upper part made of PVC-U

<sup>2)</sup> Standard design (threaded connector)



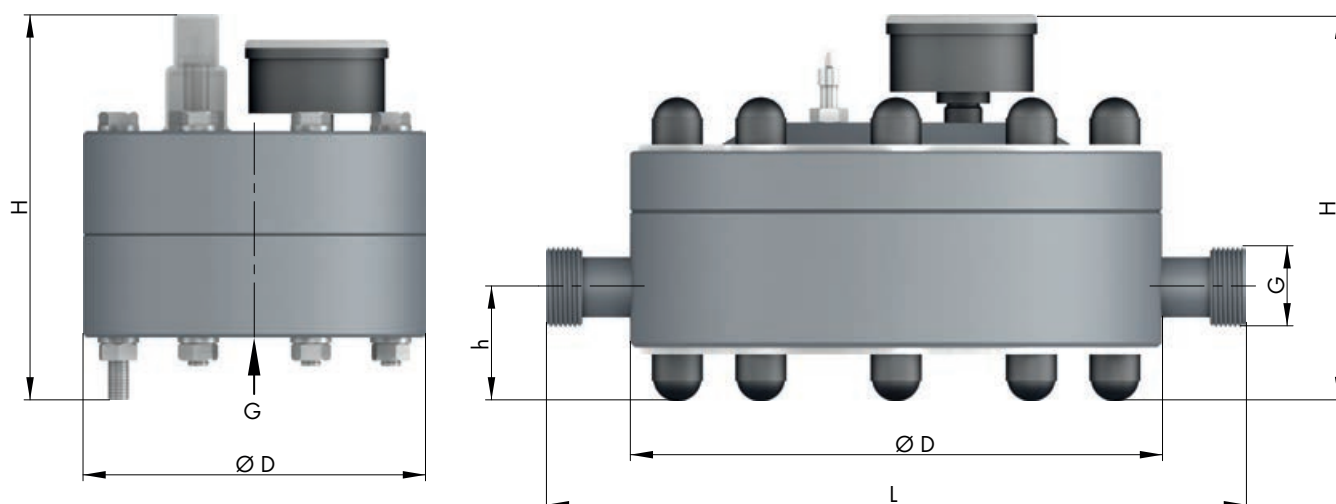
Threaded connector		713.1		
<b>DN</b> Nominal width		15	20	25
<b>G</b> Connection thread		G1	G1¼	G1½
<b>L1</b> PVC-U		213	207	235
<b>L1</b> PP		263	215	243
<b>L1</b> PVDF <sup>2)</sup>		255	215	243
Loose-type flange connector acc. to DIN2501		713.1		
<b>DN</b> Nominal width		15	20	25
<b>F</b>		95	105	115
<b>K</b>		65	75	85
<b>L2</b> PVC-U		285	285	285
<b>L2</b> PP		285	285	285

(Dimensions in mm) <sup>2)</sup> 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
<b>Weight</b>						
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 <sup>1)</sup>	kg	1,0	5,0	7,0	13,0

<sup>1)</sup> Upper part made of PVC-U

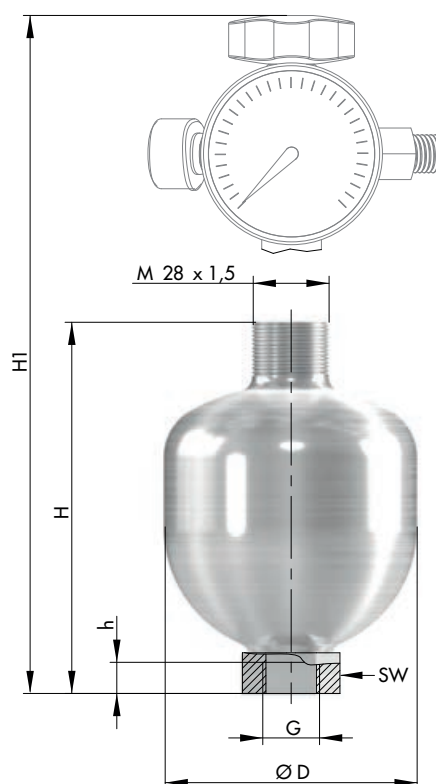
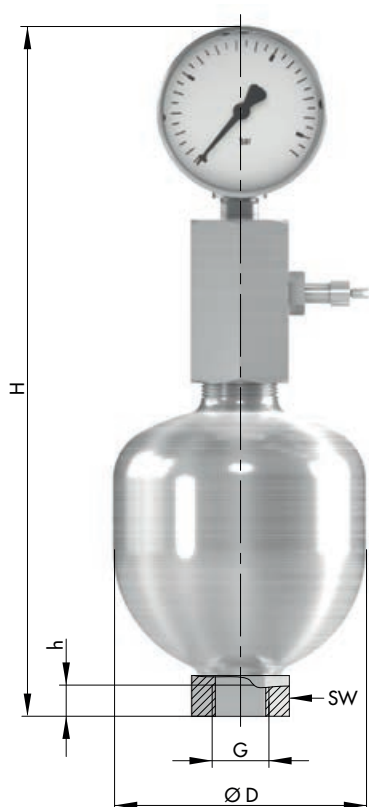


		720.1	721.2	722.1	723.1
<b>DN</b>	Nominal width	5	10	15	20
<b>G</b>	Connection thread	G½	G¾	G1	G1¼
<b>D</b>		100	180	222	280
<b>H</b>		115	165	180	211
<b>h</b>		–	45	48	46
<b>L</b>		–	250	292	330

(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
<b>G</b>	Connection thread	G½	G½	G½	G¾	G½	G½	G½	G¾
<b>D</b>		74	93	212	160	74	93	212	160
<b>H</b>	PP <sup>1)</sup>	244	257	288	338	–	–	–	–
<b>H</b>	1.4571 <sup>1)</sup>	230	243	274	324	124	137	168	218
<b>H1</b>	Optional	–	–	–	–	225	238	268	319
<b>h</b>		14	14	14	18	14	14	14	18
<b>SW</b>		30	30	41	46	30	30	41	46

(Measurements in mm)




<sup>1)</sup> 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 <sup>1)</sup>			■	■	■								
Diaphragm	EPDM	■												
	FPM	■					■	■	■	■	■	■	■	■
	PTFE		■						■	■			■	■
	PTFE-faced			■	■	■								
	Butyl						■	■	■	■	■	■	■	■

<sup>1)</sup> 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			■	■			
		PVC-U / EPDM	90025079							
		PVC-U / FPM	90021733							
	Connection adapter G3/4	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						■	
		0-25 bar	37601674							
	Filling device / pressure gauge Copper alloy measuring system	0-100 bar	37601673							
		0-250 bar	30066005							■

