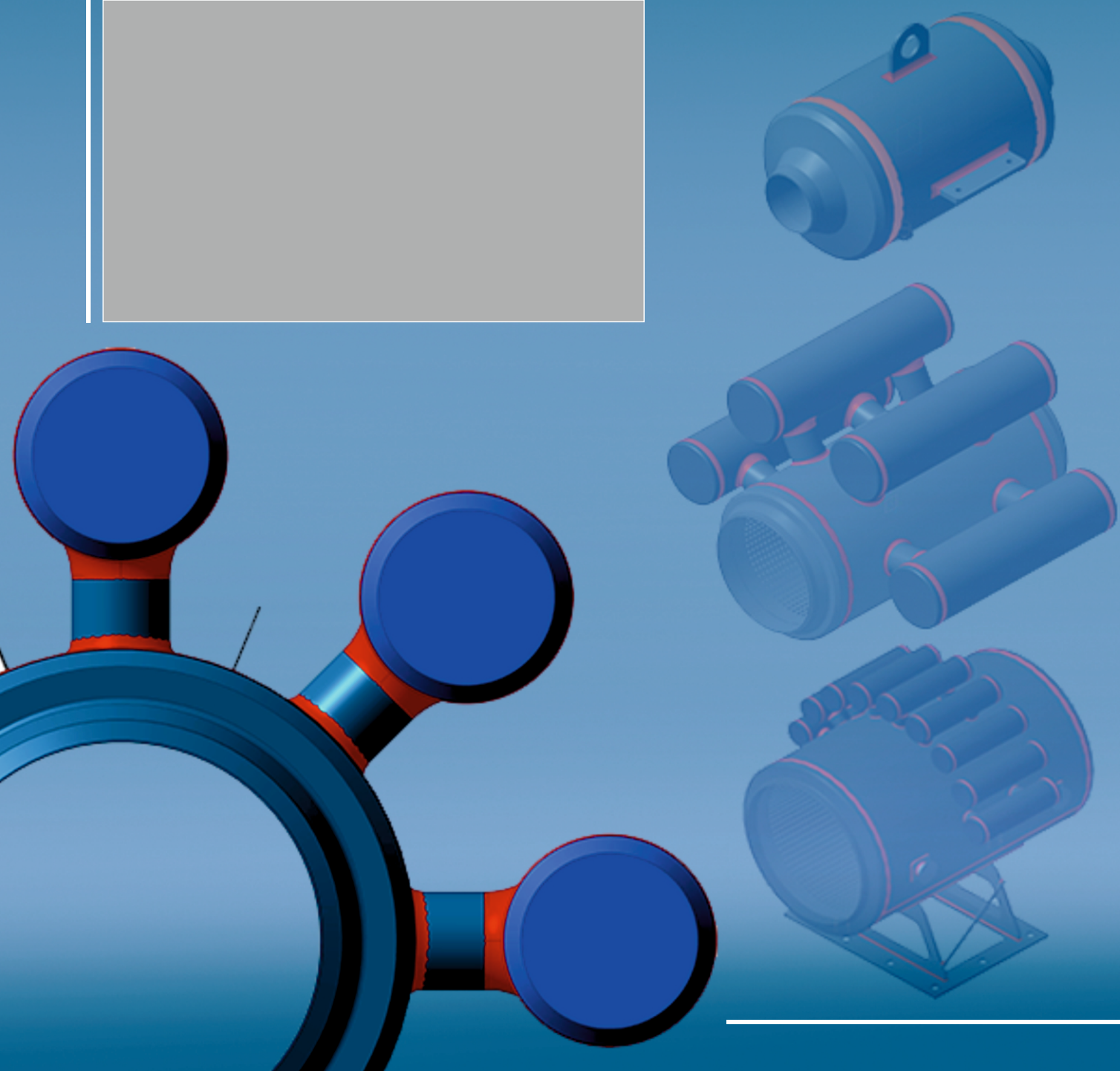
TECHPROMARMA
confidence in safety

EMERGENCY PROTECTION OF PIPELINES AND EQUIPMENT

PRESSURE AUTOSTABILIZER



CONTENT

INTRODUCTION

Pressure autostabilizer (PA) is a device for passive protection of the pipelines and equipment against water hammer, pressure pulsation and intolerable dynamic loads.

Pressure autostabilizers are intended for using on main pipelines in industrial power engineering (HPP, TPS, CHPP, etc.), municipal water and sewage systems, oil and gas industry, metallurgical engineering, chemical industry and other fields.

Pressure autostabilizers are designed as a pipe insert in a following version:

1. Pipe type SSD.P.T:
   - DN 6; 10; 15; 20; 25; 32; 50; 65; 80; 100; 125; 150; 200; 250; 300;
     P 1,0; 1,6; 2,5; 4,0; 6,0; 11,0; 12,0; 13,0; 14,0; 20,0; 25,0 MPa; T up to 350°C.
2. Chamber type SSD.P.K:
   - DN 125; 150; 200; 250; 300; 350; 400;
     P 1,0; 1,6; 2,5; 4,0; 6,0; 11,0; 12,0; 13,0; 14,0; 20,0 MPa; T up to 350°C;
   - DN 500; 600; 700; 800;
     P 1,0; 1,6; 2,5; 4,0; 6,0; 11,0; 12,0 MPa; T up to 300°C;
   - DN 900; 1000; 1200; 1400; 1600; 1800; 2000;
     P 1,0; 1,6; 2,5; 4,0 MPa; T up to 250°C.
3. It is possible to manufacture Pressure Autostabilizer with special parameters PN up to 45 MPa and T up to 550 ° C according to the customer's order form.
4. Medium:

For anticorrosion steel: alkali, acid, distillate, drain water, oils, water (nutrients, technical, condensate, desalted, showers, active drains), steam-gas (steam-air) mixture, concentrated salts, steam, oil, petroleum products, chemical solutions, air, compressed air, nitrogen, alkaline solution, steam and water mixture, clean condensate, oil-water mixture, salt solutions, pulp, decontamination and washing solutions and other medium.

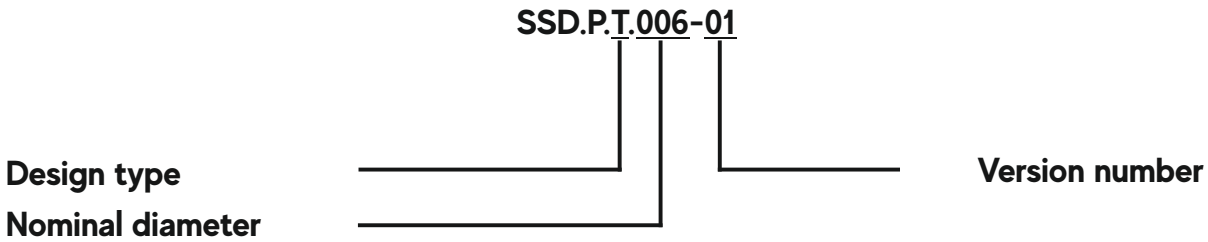
For carbon steel: water (nutrient, technical with chloride content up to 300 mg / l, desalted chemical-treated, shower water), condensate, oils, nitrogen, steam (superheated, wet), air-steam mixture, decontamination and washing solutions and other medium.

Connecting dimensions, product material, types of connection, weight and other characteristics of the product can be changed according to customer's request.

Pressure autostabilizers are installed in immediate vicinity to sources of disturbance (pumps, valves, quick-acting fittings, etc.).

5. The type of flanges up to customer choice.

Type code of PA:



Design type:

T – pipe type (damping chamber inside the housing)

K – chamber type (with external damping chambers)

PRESSURE AUTOSTABILIZER (PIPE TYPE)

SSD. P. T. DN - *

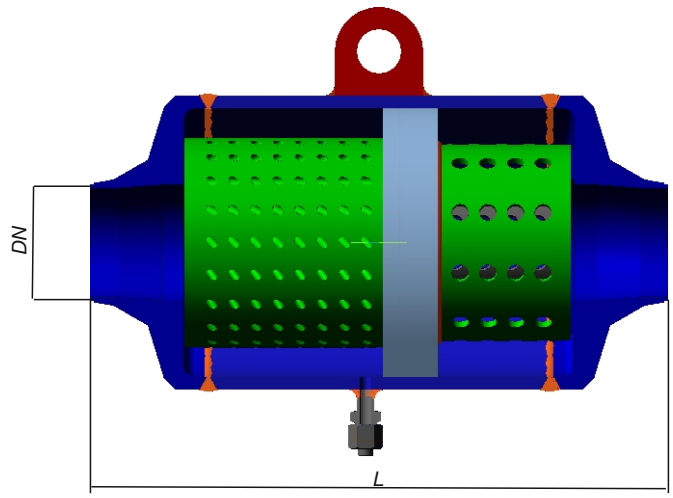
DN: 006/010/015

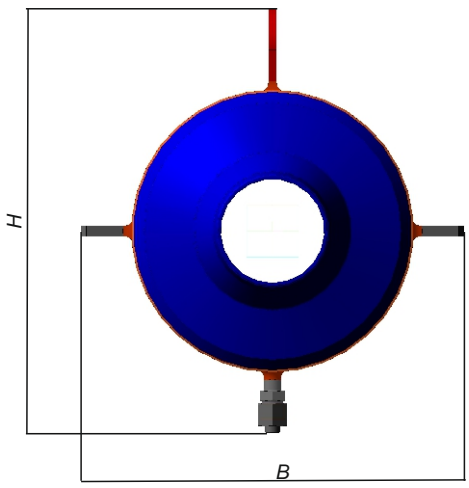
*** - Type**

T – up to 350 °C

Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	196	190	190	4,0	-02	-05
1,6	196	190	190	4,0	-09	-13
2,5	196	190	190	4,0	-17	-21
4,0	196	190	190	4,0	-25	-29
6,0	196	195	190	4,1	-	-33
11,0	196	196	196	4,2	-37	-
12,0	196	196	196	4,2	-	-41
13,0	196	196	196	4,2	-	-45
14,0	196	196	196	4,2	-49	-
20,0	196	200	200	4,8	-53	-
25,0	196	204	204	7,0	-57	-
25,0/45,0		According to the customer's request				





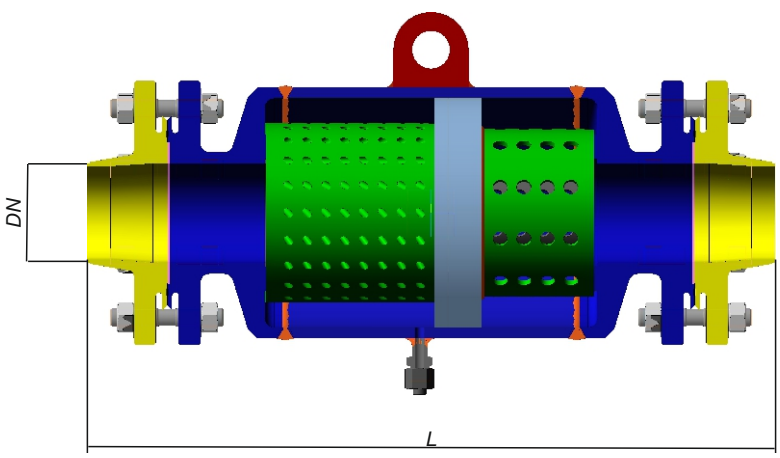
PRESSURE AUTOSTABILIZER (PIPE TYPE)

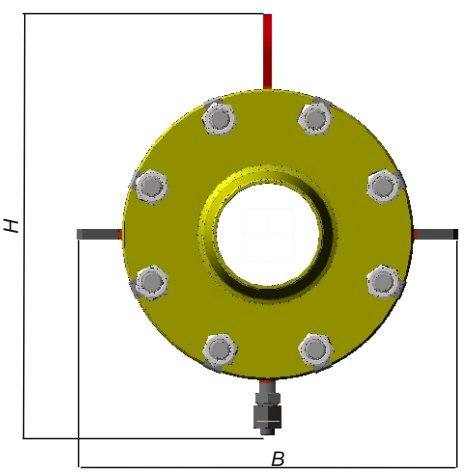
SSD. P. T. DN - *

DN: 006/010/015
*** - Version**
T – up to 350 °C

Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	328	190	190	7	-03	-07
1,6	328	190	190	7	-11	-15
2,5	328	190	190	7	-19	-23
4,0	328	190	190	7	-27	-31
6,0	380	190	190	8,9	-	-35
11,0	396	196	196	9,2	-39	-
12,0	396	196	196	9,2	-	-43
13,0	396	196	196	9,2	-	-47
14,0	396	196	196	9,2	-51	-
20,0	404	200	200	12,6	-55	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				



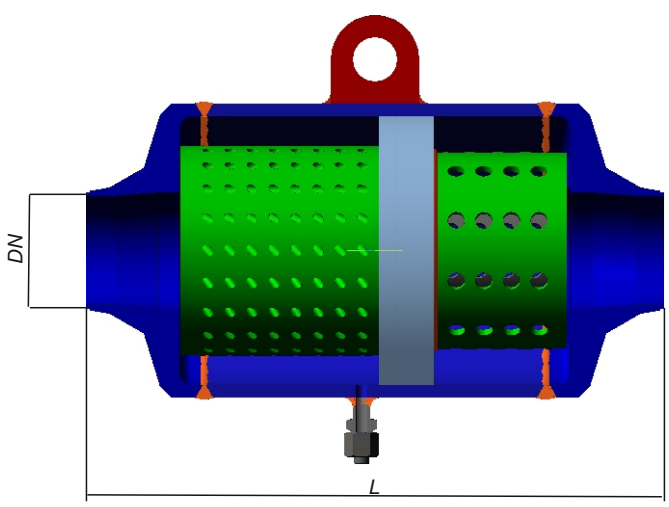


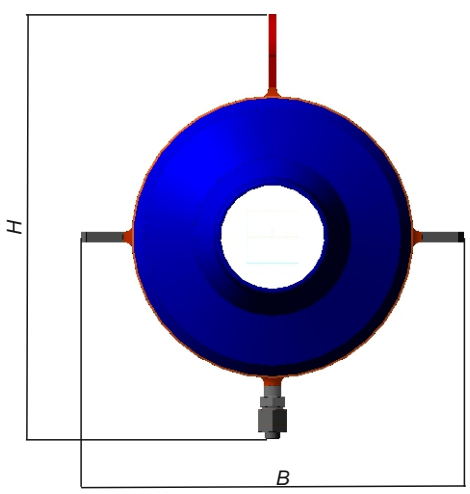
PRESSURE AUTOSTABILIZER (PIPE TYPE)

SSD. P. T. DN - *

DN: 020/025/032
*** - Version**
T – up to 350 °C
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	216	286	286	25,3	-02	-05
1,6	216	286	286	25,3	-09	-13
2,5	216	286	286	25,3	-17	-21
4,0	216	286	286	25,3	-25	-29
6,0	216	286	286	25,3	-	-33
11,0	216	300	300	33,2	-37	-
12,0	216	300	300	33,2	-	-41
13,0	216	300	300	33,2	-	-45
14,0	216	300	300	33,2	-49	-
20,0	216	316	315	41,4	-53	-
25,0	216	326	325	43,1	-57	-
25,0/45,0		According to the customer's request				

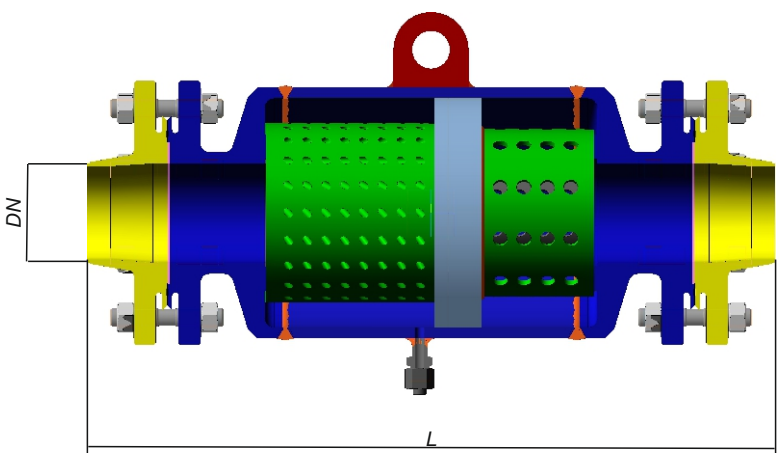


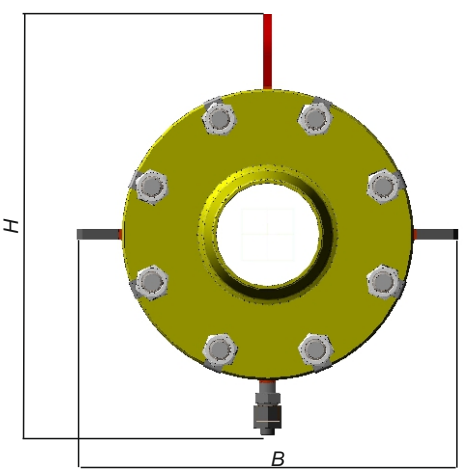


SSD. P. T. DN - *

DN: 020/025/032
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	436	286	366	29,8	-03	-07
1,6	436	286	366	29,8	-11	-15
2,5	436	286	366	29,8	-19	-23
4,0	436	286	366	29,8	-27	-31
6,0	536	406	366	32,8	-	-35
11,0	543	432	392	41,8	-39	-
12,0	543	432	392	41,8	-	-43
13,0	543	432	392	41,8	-	-47
14,0	543	432	392	41,8	-51	-
20,0	555	446	406	41,8	-55	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				



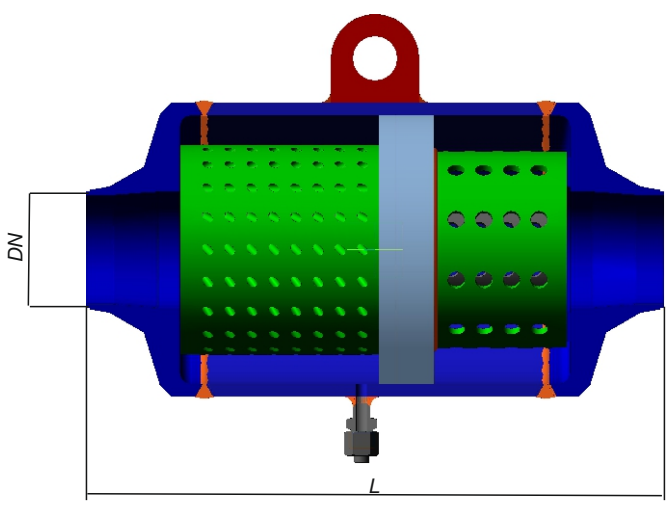


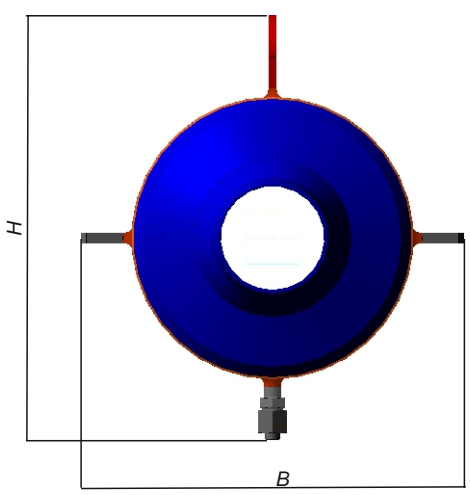
PRESSURE AUTOSTABILIZER (PIPE TYPE)

SSD. P. T. DN - *

DN: 050/065
*** - Version**
T – up to 350 °C
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	345	359	308	44,7	-02	-05
1,6	345	359	308	44,7	-09	-13
2,5	345	359	308	44,7	-17	-21
4,0	345	359	308	44,7	-25	-29
6,0	345	359	306	44,7	-	-33
11,0	362	382	322	56,4	-37	-
12,0	362	382	322	56,4	-	-41
13,0	362	382	322	56,4	-	-45
14,0	362	382	322	56,4	-49	-
20,0	391	396	338	72,4	-53	-
25,0	645	407	348	80,1	-57	-
25,0/45,0		According to the customer's request				

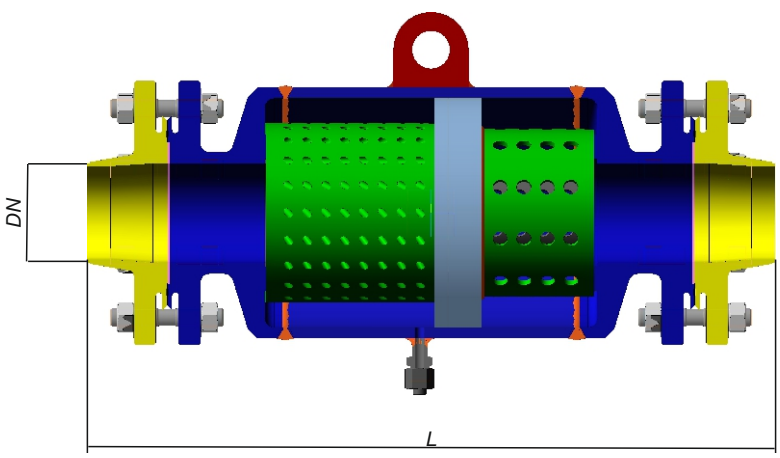


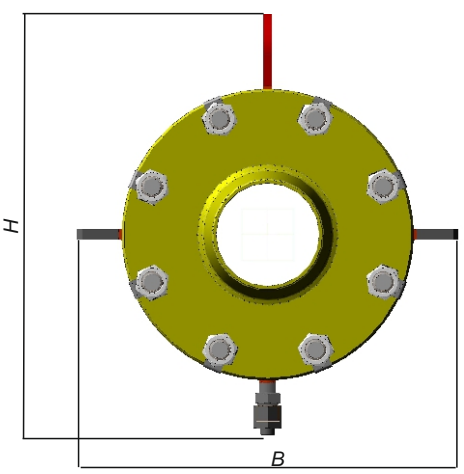


SSD. P. T. DN - *

DN: 050/065
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	645	359	308	57,9	-03	-07
1,6	645	359	308	57,9	-11	-15
2,5	645	359	308	57,9	-19	-23
4,0	645	359	308	57,9	-27	-31
6,0	650	359	306	61,7	-	-35
11,0	662	382	322	84,7	-39	-
12,0	662	382	322	84,7	-	-43
13,0	662	382	322	84,7	-	-47
14,0	662	382	322	84,7	-51	-
20,0	691	396	338	118,7	-55	-
25,0	-	-	-	-	-	-
25,0/45,0	According to the customer's request					



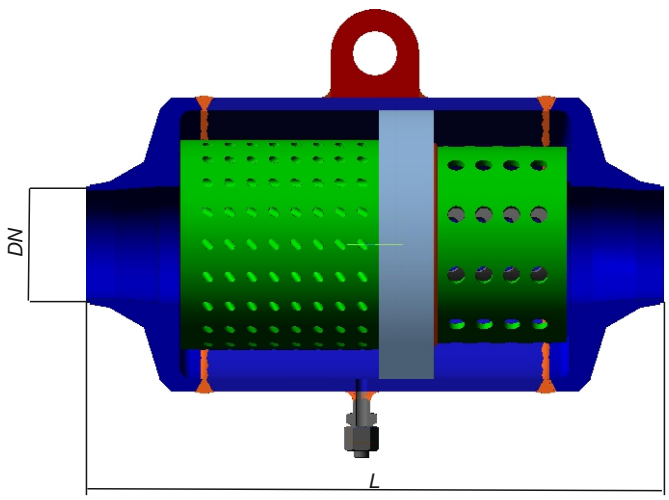


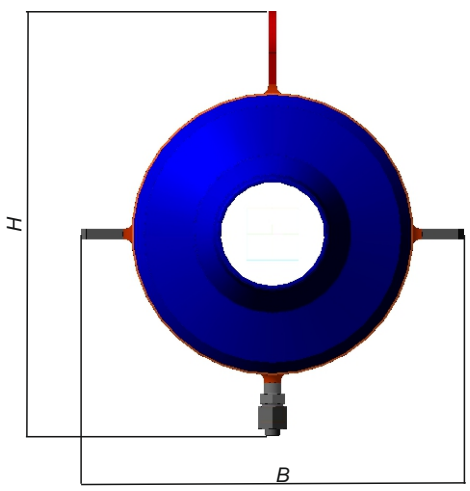
PRESSURE AUTOSTABILIZER (PIPE TYPE)

SSD. P. T. DN - *

DN: 080/100
*** - Version**
T – up to 350 °C
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	523	406	406	79,7	-02	-05
1,6	523	406	406	79,7	-09	-13
2,5	523	406	406	79,7	-17	-21
4,0	523	406	406	79,7	-25	-29
6,0	536	406	406	79,7	-	-33
11,0	552	432	432	129,7	-37	-
12,0	552	432	432	129,7	-	-41
13,0	552	432	432	129,7	-	-45
14,0	552	432	432	129,7	-49	-
20,0	538	446	446	152,2	-53	-
25,0	517	460	460	185,3	-57	-
25,0/45,0		According to the customer's request				

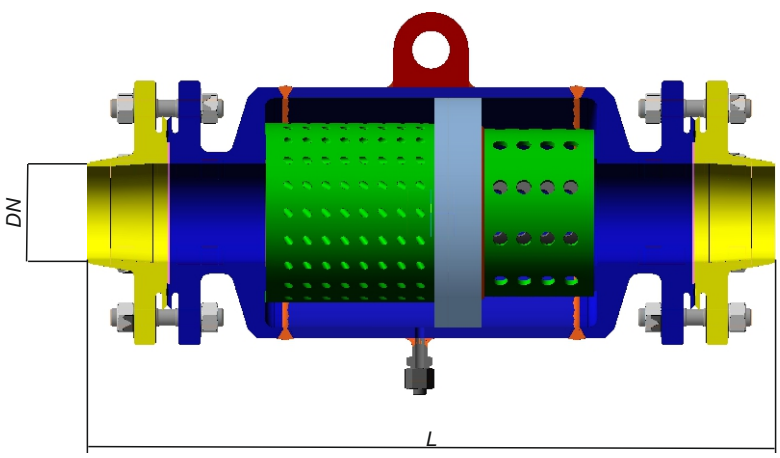


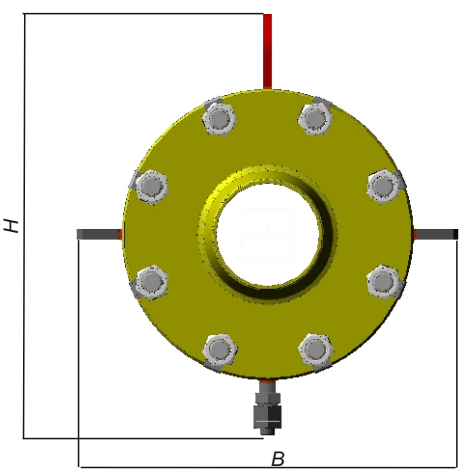


SSD. P. T. DN - *

DN: 080/100
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	523	406	406	90,2	-03	-07
1,6	523	406	406	90,2	-11	-15
2,5	523	406	406	90,2	-19	-23
4,0	523	406	406	90,2	-27	-31
6,0	532	406	406	100,6	-	-35
11,0	552	432	432	171,2	-39	-
12,0	552	432	432	171,2	-	-43
13,0	552	432	432	171,2	-	-47
14,0	552	432	432	171,2	-51	-
20,0	538	446	446	240,6	-55	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				



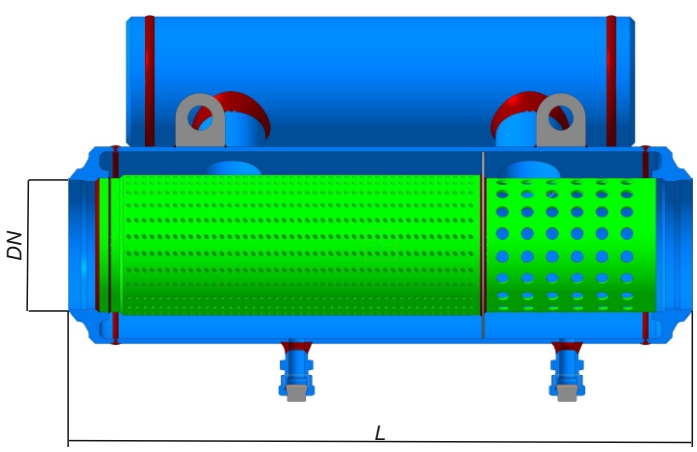


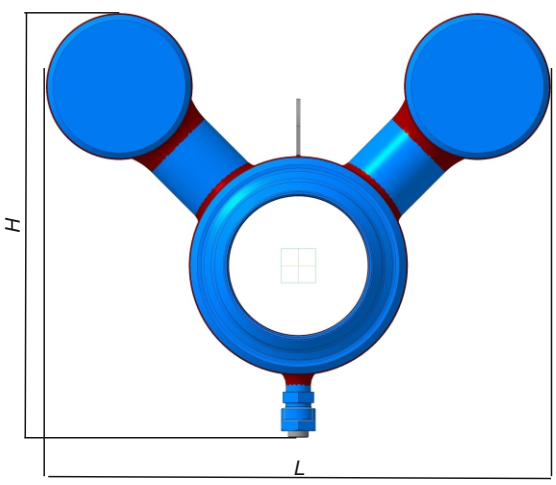
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

SSD. P. K. DN - *

DN: 125/150/200
*** - Version**
T – up to 350 °C
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	913	635	760	199	-00	-02
1,6	913	635	760	199	-04	-06
2,5	913	635	760	199	-08	-10
4,0	913	635	760	199	-12	-14
6,0	943	656	789	387	-	-16
11,0	973	696	847	657	-18	-
12,0	973	696	847	657	-	-20
13,0	973	696	847	657	-	-22
14,0	973	696	847	657	-24	-
20,0	991	728	889	911	-26	-
25,0	-	-	-	-	-	-
25,0/45,0	According to the customer's request					



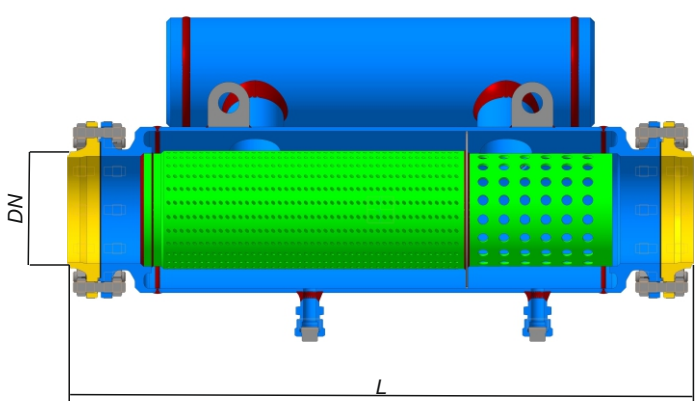


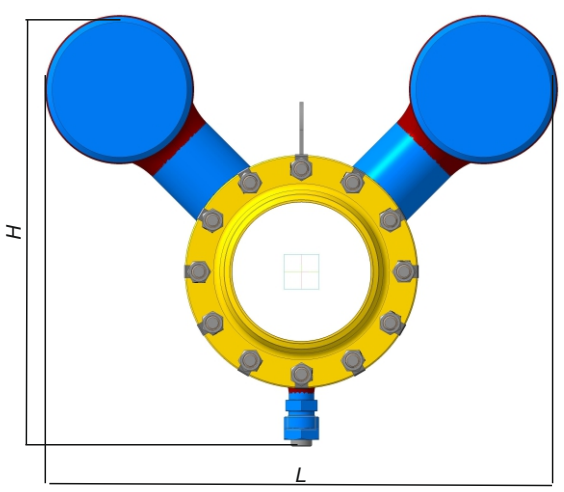
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

SSD. P. K. DN - *

DN: 125/150/200
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

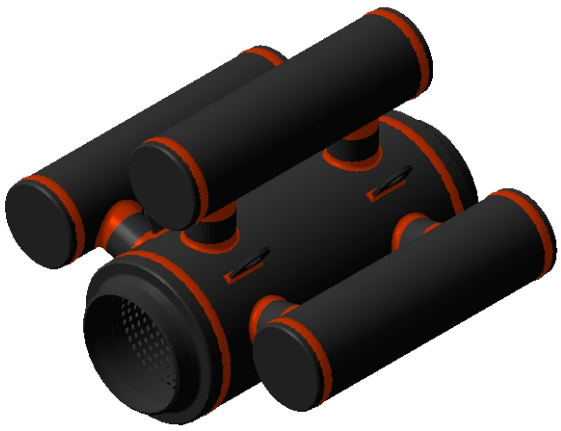
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1394	635	760	358	-01	-03
1,6	1394	635	760	358	-05	-07
2,5	1394	635	760	358	-09	-11
4,0	1394	635	760	358	-13	-15
6,0	536	406	366	358	-	-17
11,0	543	432	392	372	-19	-
12,0	543	432	392	372	-	-21
13,0	543	432	392	372	-	-23
14,0	543	432	392	372	-25	-
20,0	555	446	406	568	-27	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				





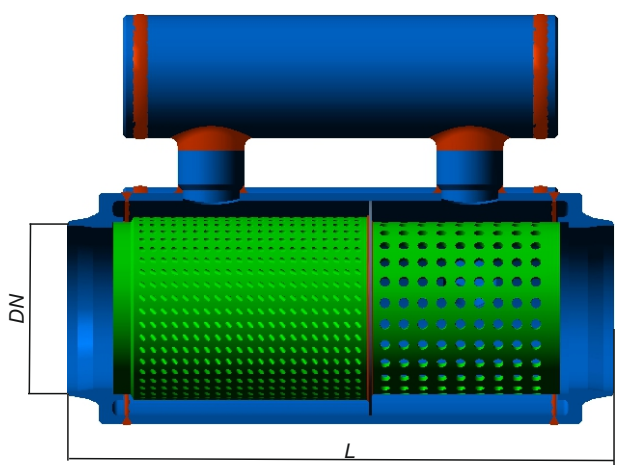
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

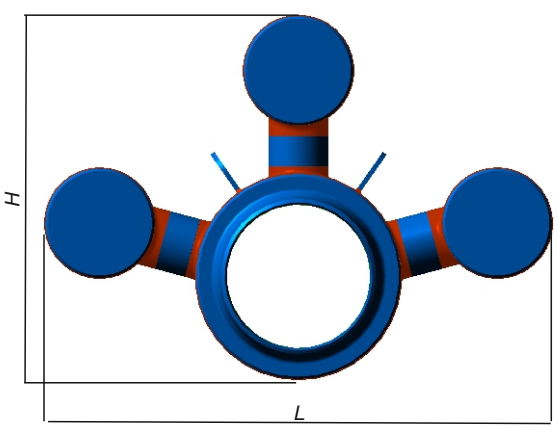
SSD. P. K. DN - *



DN: 250/300
*** - Version**
T – up to 350 °C
Medium – see point 4

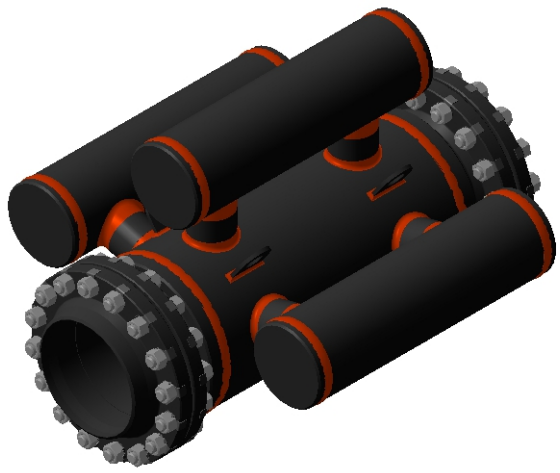
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1020	655	1034	410	-00	-02
1,6	1020	655	1034	410	-04	-06
2,5	1020	655	1034	410	-08	-10
4,0	1020	655	1034	410	-12	-14
6,0	1040	668	1048	510	-	-16
11,0	1100	792	1095	670	-18	-
12,0	1100	792	1095	670	-	-20
13,0	1100	792	1095	670	-	-22
14,0	1100	792	1095	670	-24	-
20,0	1200	812	1185	1180	-26	-
25,0	-	-	-	-	-	-
25,0/45,0		**According to the customer's request**				





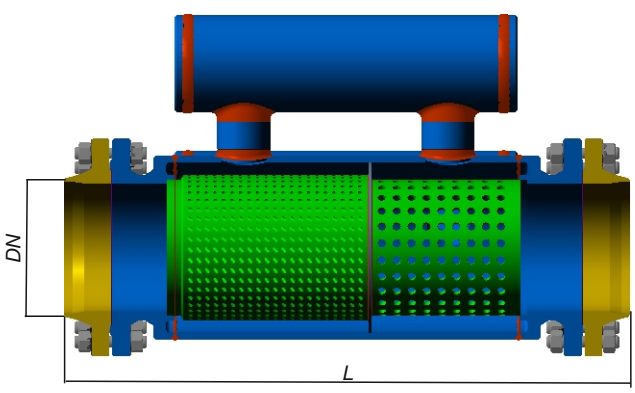
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

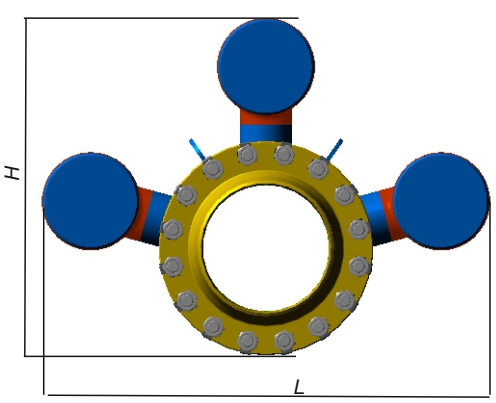
SSD. P. K. DN - *



DN: 250/300
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

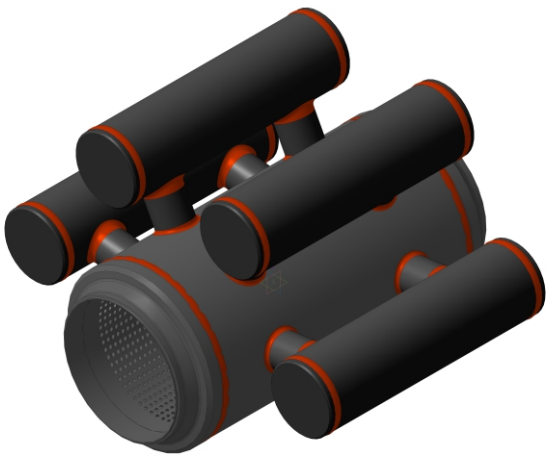
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1820	655	1034	565,6	-01	-03
1,6	1820	655	1034	565,6	-05	-07
2,5	1820	655	1034	565,6	-09	-11
4,0	1820	655	1034	565,6	-13	-15
6,0	1900	668	1048	713	-	-17
11,0	1900	792	1095	1046	-19	-
12,0	1900	792	1095	1046	-	-21
13,0	1900	792	1095	1046	-	-23
14,0	1900	792	1095	1046	-25	-
20,0	2000	812	1185	2340	-27	-
25,0	-	-	-	-	-	-
25,0/45,0		**According to the customer's request**				





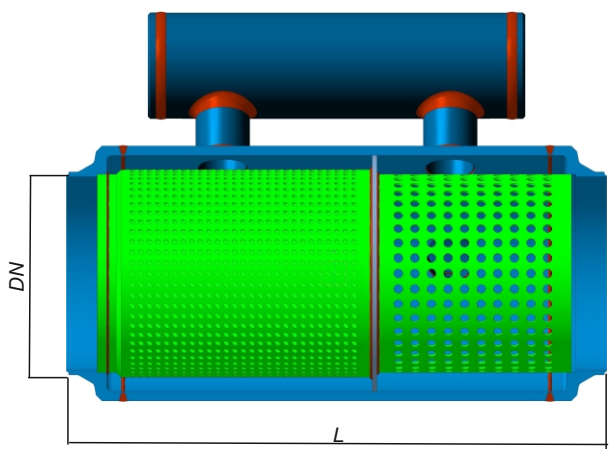
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

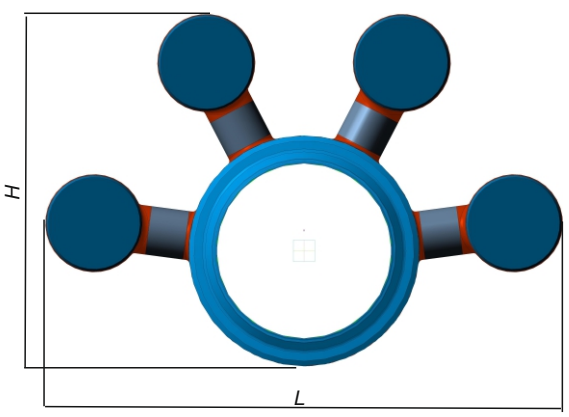
SSD. P. K. DN - *



DN: 350/400
*** - Version**
T – up to 350 °C
Medium – see point 4

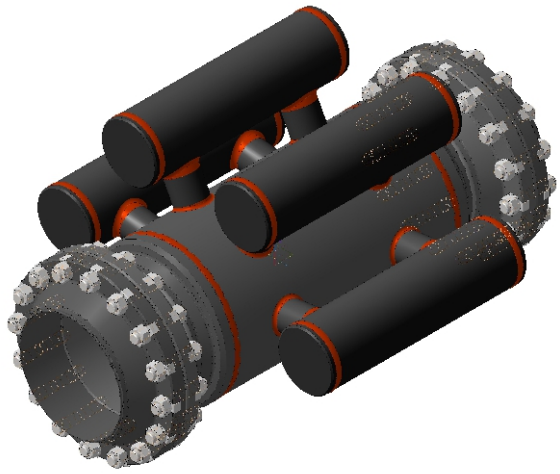
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1150	708	1070	630	-00	-02
1,6	1150	708	1070	630	-04	-06
2,5	1150	708	1070	630	-08	-10
4,0	1150	708	1070	630	-12	-14
6,0	1150	894	1212	1120	-	-16
11,0	1150	894	1212	1120	-18	-
12,0	1150	894	1212	1120	-	-20
13,0	1150	894	1212	1120	-	-22
14,0	1150	894	1212	1120	-24	-
20,0	1150	892	1216	1580	-26	-
25,0	-	-	-	-	-	-
25,0/45,0		**According to the customer's request**				





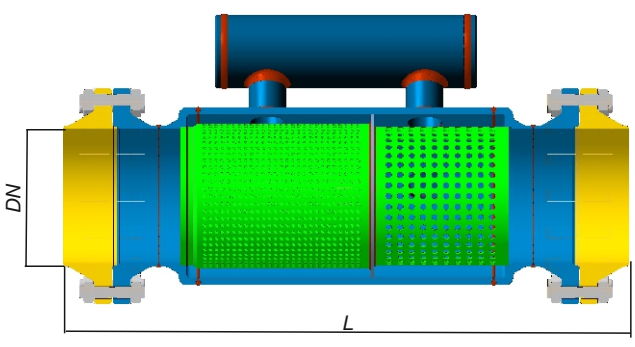
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

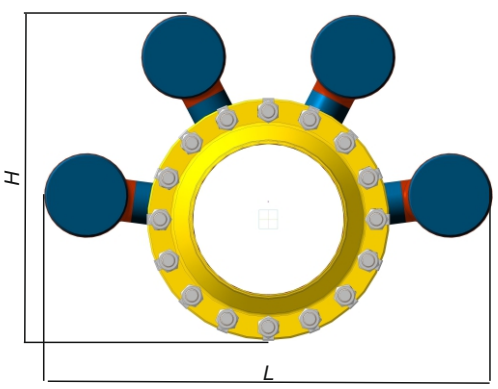
SSD. P. K. DN - *



DN: 350/400
*** - Version**
T – up to 350 °C
Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1580	708	1070	911	-01	-03
1,6	1580	708	1070	911	-05	-07
2,5	1580	708	1070	911	-09	-11
4,0	1580	708	1070	911	-13	-15
6,0	1600	894	1212	1150	-	-17
11,0	1625	894	1212	1529	-19	-
12,0	1625	894	1212	1529	-	-21
13,0	1625	894	1212	1529	-	-23
14,0	1625	894	1212	1529	-25	-
20,0	1870	892	1216	2830	-27	-
25,0	-	-	-	195,1	-	-
25,0/45,0		According to the customer's request				



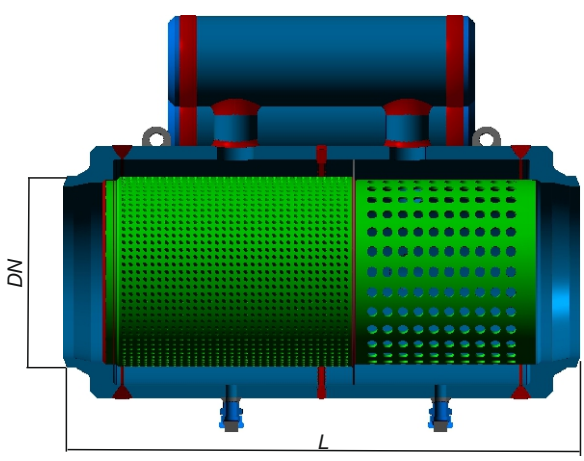


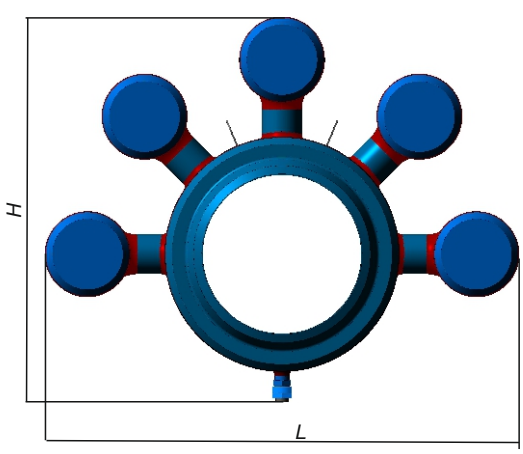
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

SSD. P. K. DN - *

DN: 500
*** - Version**
T – up to 350 °C
Medium – see point 4

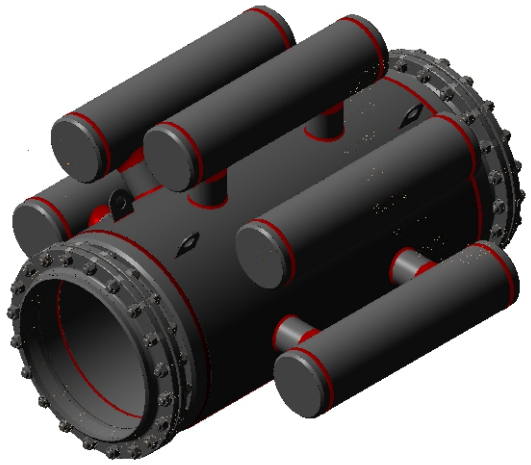
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1324	1060	1280	470	-00	-02
1,6	1324	1060	1280	470	-04	-06
2,5	1356	1084	1314	635	-08	-10
4,0	1356	1084	1314	660	-12	-14
6,0	1361	1105	1349	820	-	-16
11,0	1444	1165	1432	1370	-18	-
12,0	1444	1165	1432	1370	-	-20
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0	According to the customer's request					





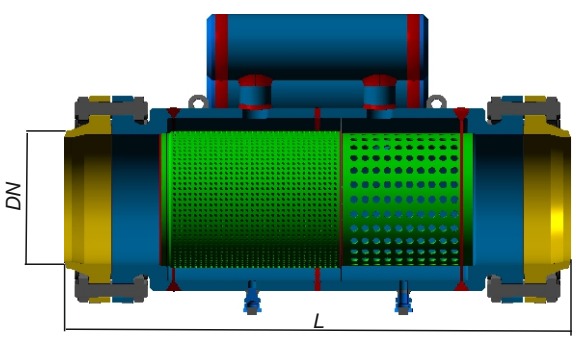
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

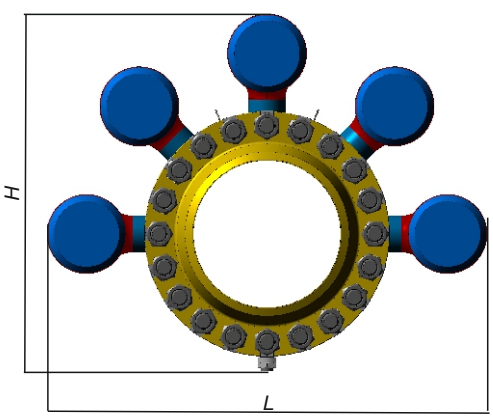
SSD. P. K. DN - *



DN: 500
*** - Version**
T – up to 300 °C
Flanges – see point 5
Medium – see point 4

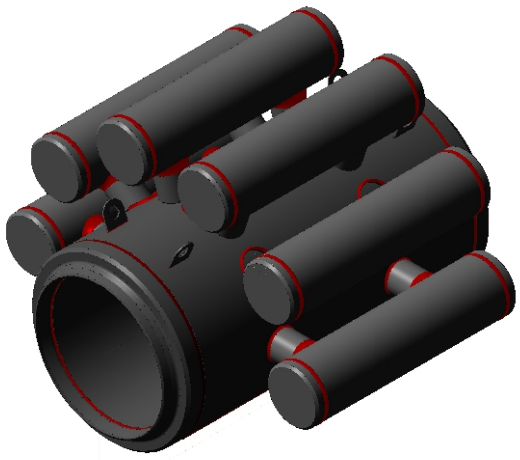
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1511	1060	635	635	-01	-03
1,6	1511	1060	635	785	-05	-07
2,5	1633	1083	366	1075	-09	-11
4,0	1633	1083	366	1310	-13	-15
6,0	1743	1105	366	1740	-	-17
11,0	1941	1165	392	2370	-19	-
12,0	1941	1165	392	2370	-	-21
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0	According to the customer's request					





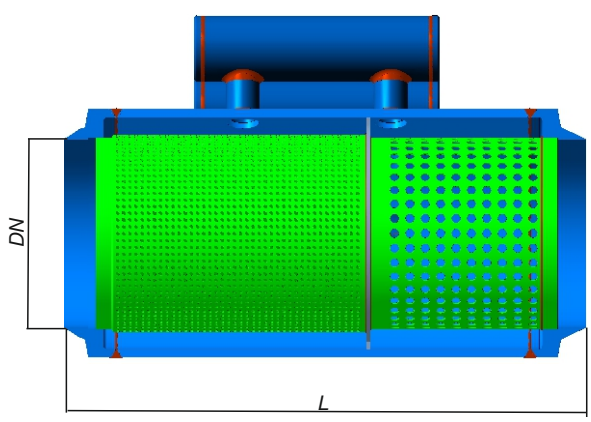
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

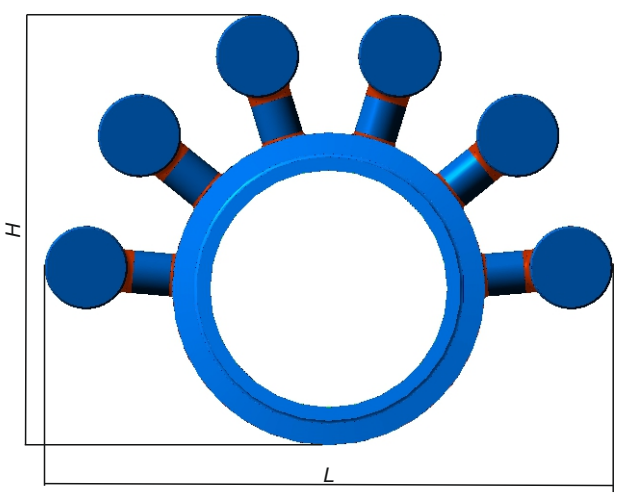
SSD. P. K. DN - *



DN: 600
*** - Version**
T – up to 300 °C
Medium – see point 4

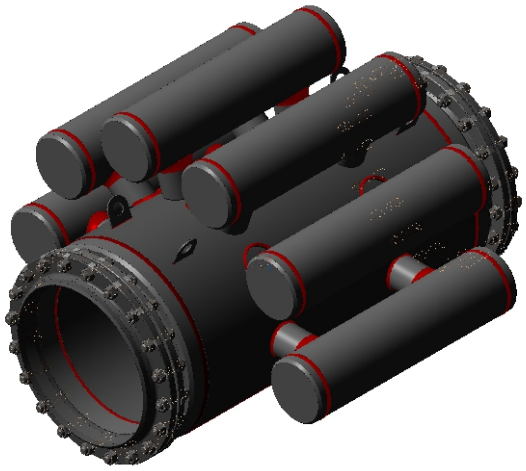
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1420	1134	1328	1120	-00	-04
1,6	1420	1134	1328	1120	-08	-12
2,5	1420	1134	1328	1120	-16	-20
4,0	1420	1134	1328	1120	-24	-26
6,0	1480	1248	1452	1740	-	-28
11,0	1480	1264	1458	2450	-30	-
12,0	1480	1264	1458	2450	-	-32
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0	According to the customer's request					





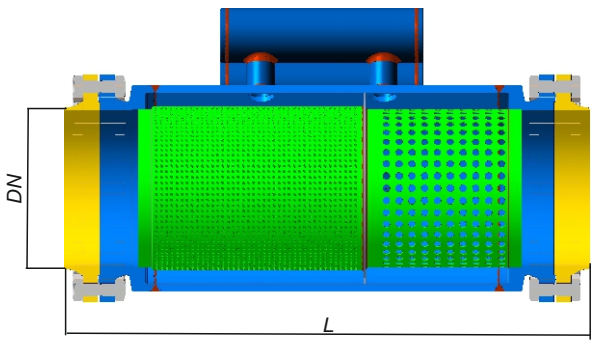
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

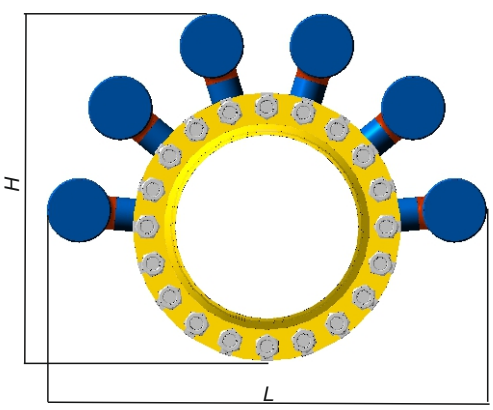
SSD. P. K. DN - *



DN: 600
*** - Version**
T – up to 300 °C
Flanges – see point 5
Medium – see point 4

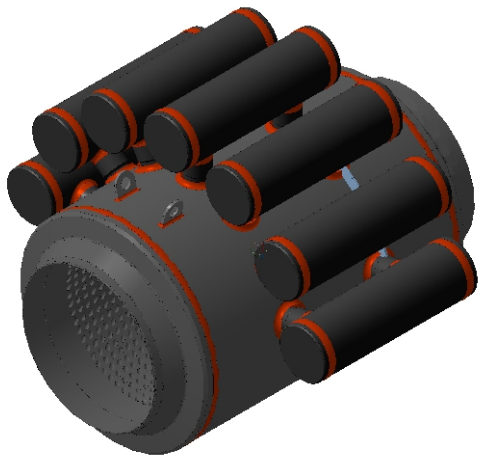
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	2060	1134	1328	1848	-01	-05
1,6	2060	1134	1328	1848	-09	-13
2,5	2060	1134	1328	1848	-17	-21
4,0	2060	1134	1328	1848	-25	-27
6,0	2120	1248	1452	3130	-	-29
11,0	2140	1264	1458	4850	-31	-
12,0	2140	1264	1458	4850	-	-33
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				





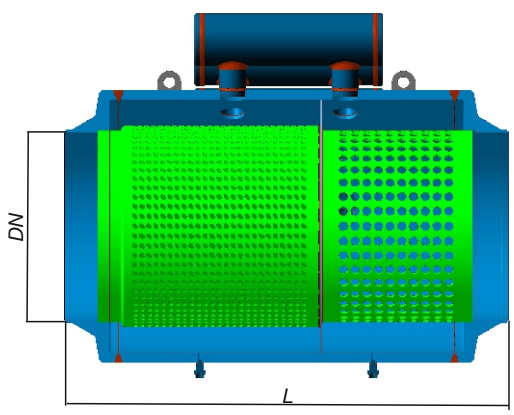
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

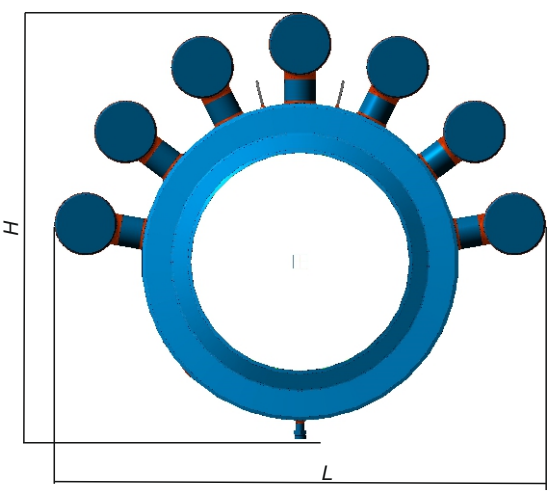
SSD. P. K. DN - *



DN: 700/800
*** - Version**
T – up to 300 °C
Medium – see point 4

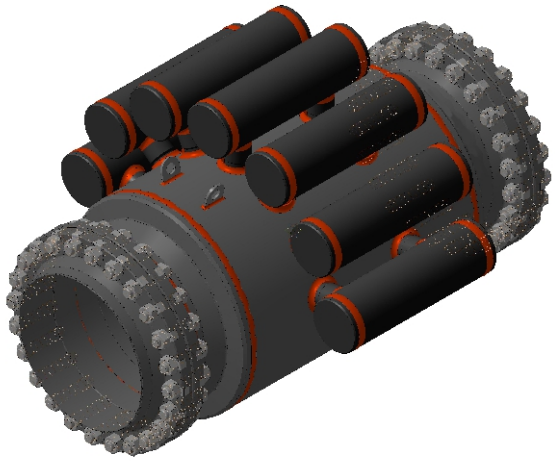
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1720	1400	1585	1350	-00	-02
1,6	1720	1400	1585	1350	-04	-06
2,5	1770	1428	1620	2000	-08	-10
4,0	1770	1428	1620	2000	-12	-14
6,0	1810	1460	1675	2640	-	-16
11,0	1850	1550	1784	4600	-18	-
12,0	1850	1550	1784	4600	-	-20
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				





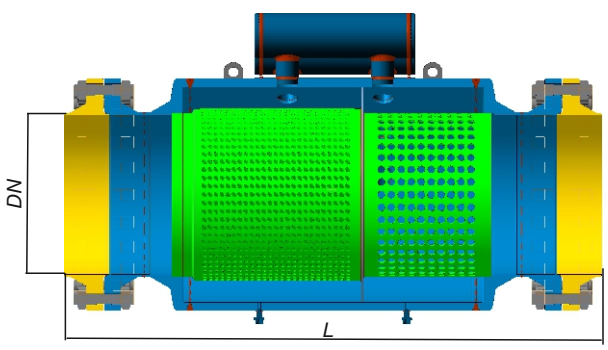
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

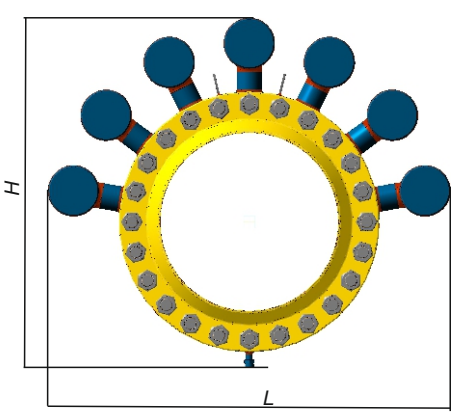
SSD. P. K. DN - *



DN: 700/800
*** - Version**
T – up to 300 °C
Flanges – see point 5
Medium – see point 4

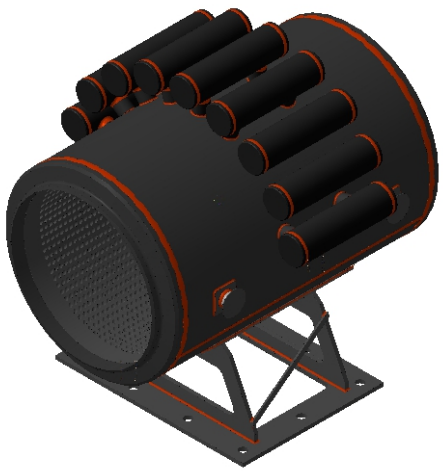
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	1910	1400	1585	1560	-01	-03
1,6	2010	1400	1585	1780	-05	-07
2,5	2110	1428	1630	2660	-09	-11
4,0	2220	1428	1630	2960	-13	-15
6,0	2390	1460	1675	4010	-	-17
11,0	2450	1550	1784	6650	-19	-
12,0	2450	1550	1784	6650	-	-21
13,0	-	-	-	-	-	-
14,0	-	-	-	-	-	-
20,0	-	-	-	-	-	-
25,0	-	-	-	-	-	-
25,0/45,0		According to the customer's request				





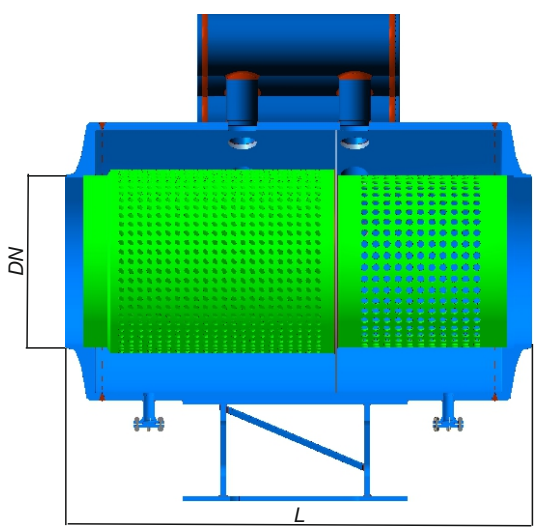
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

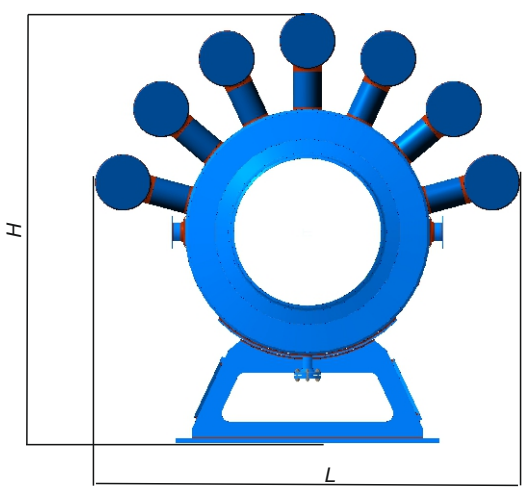
SSD. P. K. DN - *



DN: 900/1000
*** - Version**
T – up to 250 °C
Medium – see point 4

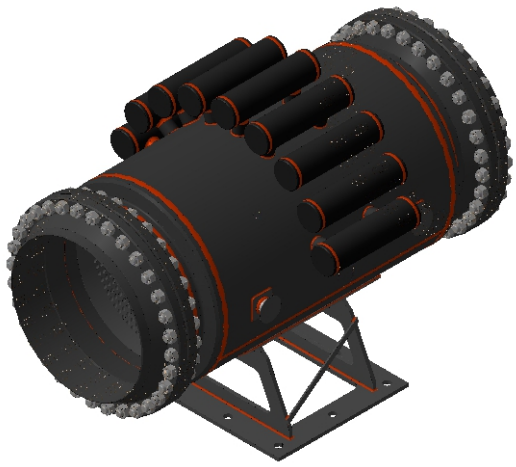
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	2450	2510	2340	4130	-00	-02
1,6	2450	2510	2340	4130	-04	-06
2,5	2470	2550	2380	4940	-08	-10
4,0	2490	2580	2400	6040	-12	-14
6,0/45,0		According to the customer's request				





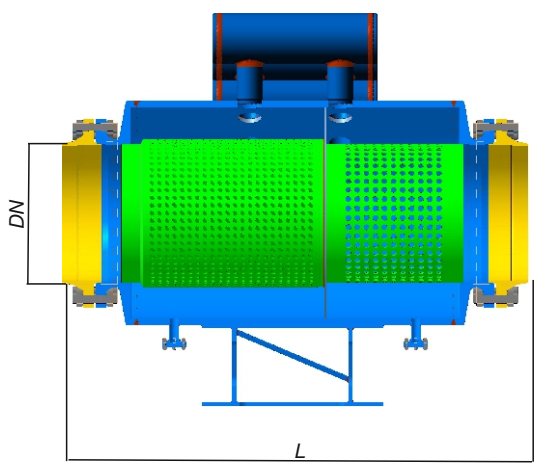
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

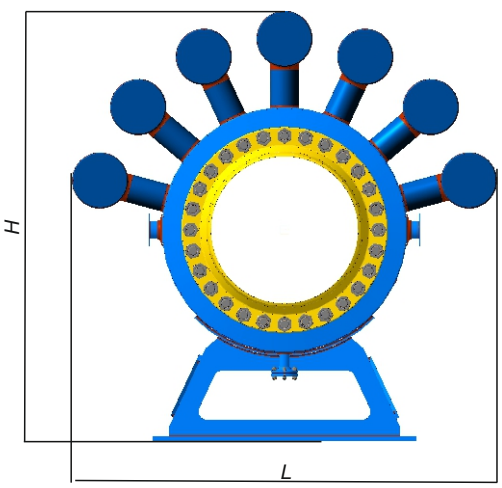
SSD. P. K. DN - *



DN: 900/1000
*** - Version**
T – up to 250 °C
Flanges – see point 5
Medium – see point 4

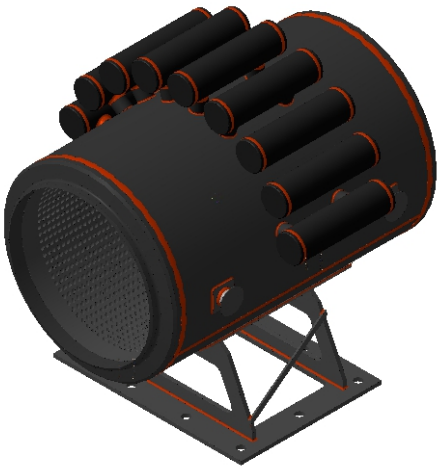
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	2600	2510	2340	4670	-01	-03
1,6	2600	2510	2340	5010	-05	-07
2,5	2720	2550	2380	6350	-09	-11
4,0	2900	2580	2400	8210	-13	-15
6,0/45,0		According to the customer's request				





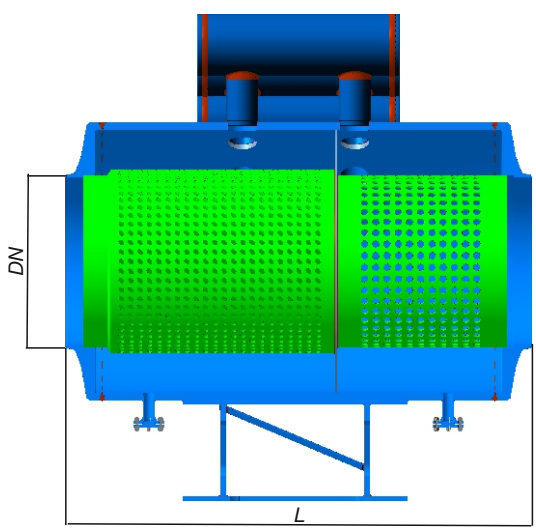
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

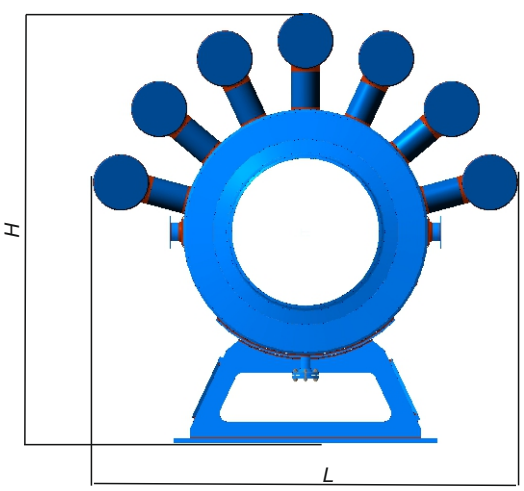
SSD. P. K. DN - *



DN: 900/1000
*** - Version**
T – up to 250 °C
Medium – see point 4

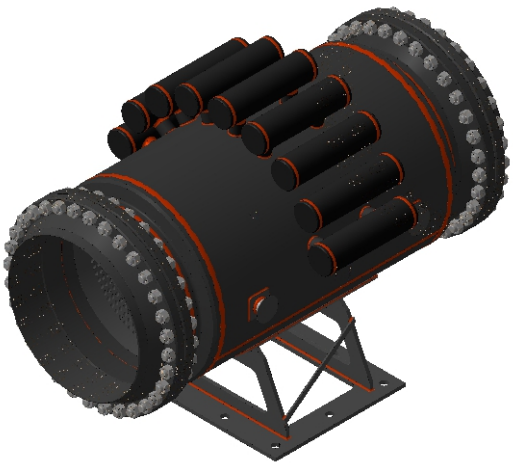
Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	2580	2610	2580	7500	-00	-02
1,6	2580	2610	2580	7500	-04	-06
2,5	2580	2610	2580	7500	-08	-10
4,0	2580	2610	2580	7500	-12	-14
6,0/45,0		According to the customer's request				





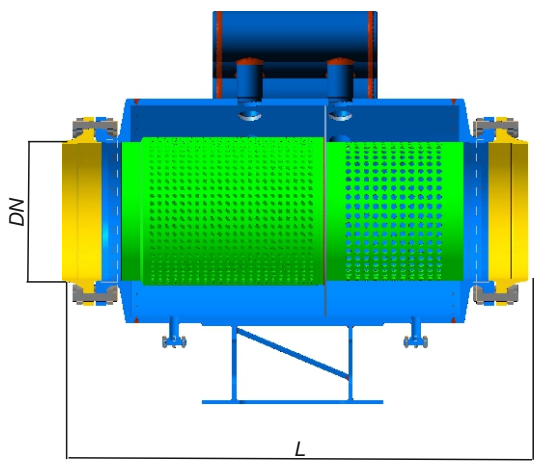
PRESSURE AUTOSTABILIZER (CHAMBER TYPE)

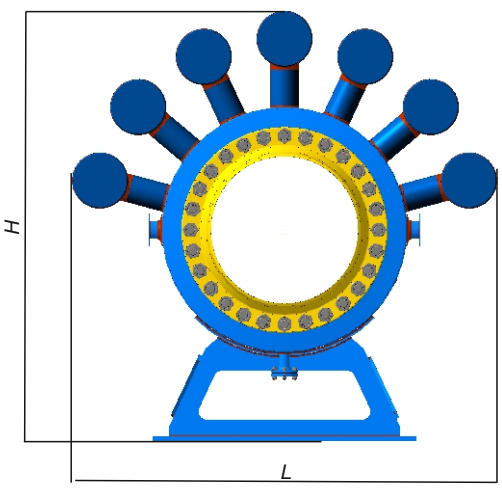
SSD. P. K. DN - *



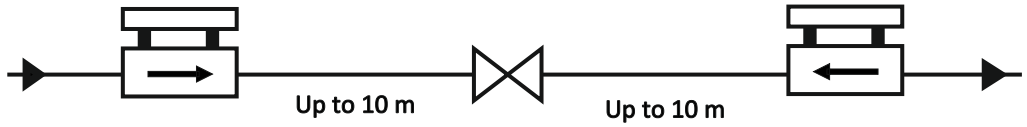
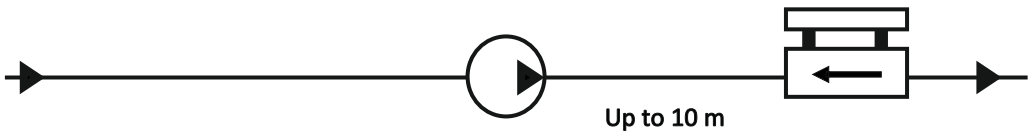
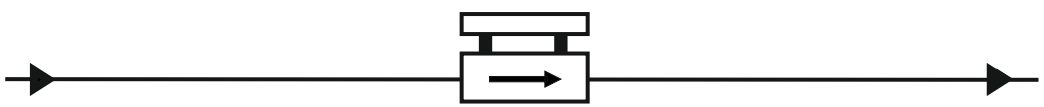
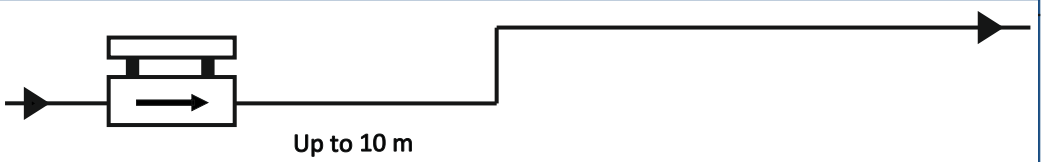
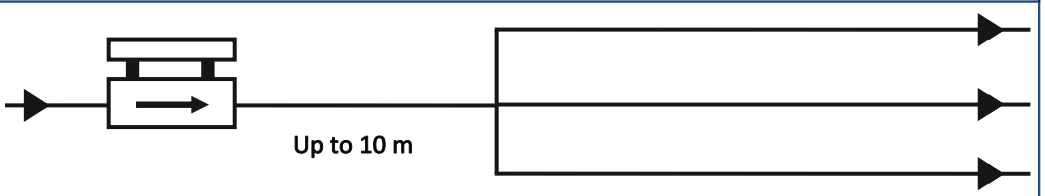
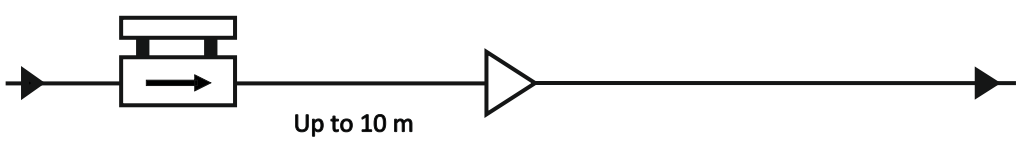
DN: 1200
*** - Version**
T – up to 250 °C
Flanges – see point 5
Medium – see point 4

Working Pressure P, MPa	Length L, мм	Altitude H, мм	Width B, мм	Mass (max) M, kg	Steel Types	
					Stainless steel	Carbon steel
1,0	3300	2610	2580	10640	-01	-03
1,6	3300	2610	2580	10640	-05	-07
2,5	3300	2610	2580	10640	-09	-11
4,0	3300	2610	2580	10640	-13	-15
6,0/45,0		According to the customer's request				

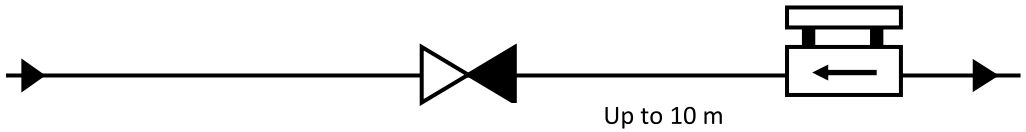
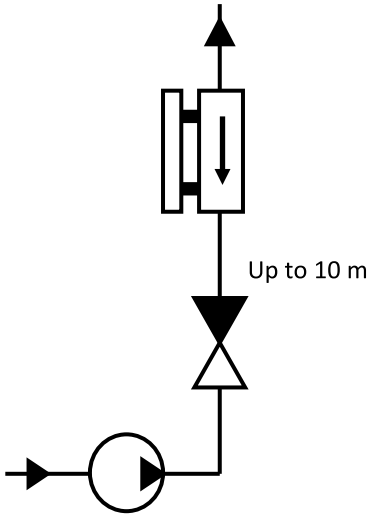




GUIDLINE FOR PA INSTALLATION

№	Installation site	Diagram installation
1	In immediate vicinity of check valves, pumps and other sources of disturbance including gate valves, regulating valves (before and after these devices)	
2	After pumps	
3	In systems where pumps are used to boost pressure in the pipeline, PA must be installed before and after the pumps	
4	In section where a two-phase flow can occur, in section where two flows with different parameters get mixed	
5	Under pipe bend	
6	On branching section of pipeline (three-way pipe)	
7	Under pipe restrictor	

GUIDLINE FOR PA INSTALLATION

№	Installation site	Diagram installation
8	After check valve	
9	On vertical section with possibility of circulation backflow, after check valve (in the direction of working fluid)	

OPDER FORM

Completed order form please send to our E-mail: tpa@tehpromarma.ru

Data:			
Customer:			
1.			
2.			
Disturbance source, characteristics:			
Pump/ compressor	Type		
	Flow, м^3/h		
	Upstream pressure , MPa		
	Downstream pressure, MPa		
	Number of simultaneously working pumps /compressors		
Valves	Global valve/gate valve/gate/others	Type	
		DN, mm	
		Opening/closing time, sec	
		Valve actuating frequency	
	Regulating valve	Type	
		DN, mm	
		Flow, м^3/h	
Working medium	Ambient temperature, C°		
	Medium temperature, C°		
	Working pressure, MPa		
	Medium composition	Name of medium	
		Component, %	
		Density, kg/m^3	
	Pipeline	Supply pipeline diameter, mm	
		Flow, m^3/h	
		Flow rate, m/s	
		Pipeline age, years	
		Pipeline elevation difference, m	
		Pipeline material	
You must enclose installation diagram with indication of valves and pipe lengths (or piping sketch)			

Order-form for Pressure Autostabilizer		
Nominal diameter, mm		
Versions:		
		
Pipe type up to DN100	Chamber type DN125 - 2000	
Nominal pressure, MPa		
End connection type of pipeline	Flanged/ flanged with set of counter flanges	
	Welding	
	Screwed	
Type of material	Steel 20 (carbon steel)	
	09G2S (low alloy steel grade)	
	08H18N10T (stainless steel)	
	other	
Availability of connecting pipe		

The proposed Pressure Autostabilizer shall comply with the requirements:
- performance (instant response to hydrodynamic disturbance)
- energy independent
- no regulatory controls and no loss of process medium
- damping elements don't wear out and don't require replacement
- Pressure Autostabilizer operation based on autostabilization effect. Impulse acts as a damping element

If needed the manufacturer may request additional information	
Full names of authorized representatives	
Tel./E-Mail	

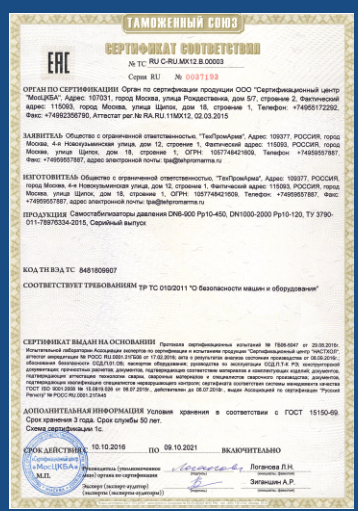
SERTIFICATION

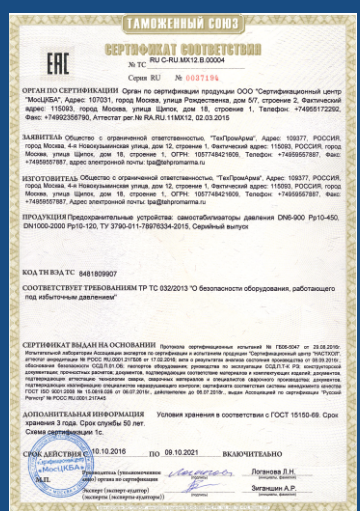

IQNet
THE INTERNATIONAL CERTIFICATION NETWORK
CERTIFICATE
IQNet and
Certification Association "Russian Register"
hereby certify that the organization
"TechPromArma" Limited Liability Company
Legal address: 12, 4th Novokuzminskaya Str., 115093, Moscow, Russia
Actual address: 18, Schipok Str., building 1, office 20,
115093, Moscow, Russia
for the following field of activities
scientific and research, experimental and design, planning and technology works, innovation adjustment, design, manufacture, supplying, maintenance, technical support and testing of pressure stabilizers, collapsible autorelever of pressure surges in process medium in main delivery pipelines as well as pipeline valves, pipeline equipment, auxiliary devices for pipeline and equipment at facilities use; wholesale and retail trade in components and equipment for general industrial and special purposes
has implemented and maintains a
Management System
which fulfils the requirements of the following standard
ISO 9001:2008
Issued on : 6th July, 2015
Validity date : 6th July, 2018
Registration Number : RU-15.0819.026
Michael Drechsel
President of IQNet
Arkadiy Vladimirtsev,
Director General of
Russian Register
IQNet Partners*:
AENOR Spain AFNOR Certification France AIB-Vincotte International Belgium APCER Portugal CCC Cyprus CISQ Italy CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil FQS Poland HKQAA Hong Kong HQC China ICONTEC Colombia IMNC Mexico INTECO Costa Rica IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland PCBC Poland Quality Austria Austria RR Russia SIQ Slovenia SII Israel SIQ Slovenia SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St-Petersburg Russia TSE Turkey YUQS Serbia
* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com


СИСТЕМА СЕРТИФИКАЦИИ РУССКОГО РЕГИСТРА
RUSSIAN REGISTER CERTIFICATION SYSTEM
CERTIFICATE
This is to certify that the Quality Management System of
"TechPromArma" Limited Liability Company
Legal address: 12, 4th Novokuzminskaya Str., 115093, Moscow, Russia
Actual address: 18, Schipok Str., building 1, office 20, 115093, Moscow, Russia
has been assessed and found to be in accordance with the requirements of
ISO 9001:2008
in respect of scientific and research, experimental and design, planning and technology works, innovation adjustment, design, manufacture, supplying, maintenance, technical support and testing of pressure stabilizers, collapsible autorelever of pressure surges in process medium in main delivery pipelines as well as pipeline valves, pipeline equipment, auxiliary devices for pipeline and equipment at facilities use; wholesale and retail trade in components and equipment for general industrial and special purposes
No: 15.0819.026
of 6th July, 2015
This certificate is valid until 6th July, 2018
Specification of the certification scope is provided in Annex. This certificate becomes invalid if conditions of certification are not fulfilled (http://www.rusregister.ru/docs/004.06-105.pdf). This Certificate is the property of Certification Association "Russian Register".
RUSSIAN REGISTER РУССКИЙ РЕГИСТР
01-001187


VšĮ TECHNIKOS PRIEŽIŪROS TARNYBA
ATITIKTIES SERTIFIKATAS
CERTIFICATE OF CONFORMITY
Nr. 2014/68/ES/2016/56
Pagal Europos Parlamento ir Tarybos direktyvos 2014/68/ES „Slėginė įranga" D modulį
According to Directive 2014/68/EU "Pressure equipment" Module D
Gamintojas: TechPromArma Ltd
Manufacturer:
Adresas: 4th Novokuzminskaya 12 str., 115093, Moscow, Russia
Address:
Slėginės įrangos pavadinimas: Slėginis autostabilizatorius
Pressure equipment description: Pressure autostabilizer
Priedo Nr.: 16/45-1
Annex No.
Technikos priežiūros tarnybos direktorius: Algirdas Misiuras
Atitikties sertifikato išdavimo data: 2016-10-04
(date of issue)


VšĮ TECHNIKOS PRIEŽIŪROS TARNYBA
ES TIPO TYRIMO SERTIFIKATAS
EU TYPE-EXAMINATION CERTIFICATE
Nr. 2014/68/ES/2016/46
Pagal Europos Parlamento ir Tarybos direktyvą 2014/68/ES „Slėginė įranga"
B modulis (projekto tipas)
According to Directive 2014/68/EU "Pressure equipment"
Module B (design type)
Gamintojas ir jo adresas: TechProm Arma Ltd, Shchipok str. 18, building1, office 20 Moscow, Russia
Name and address of manufacturer
SLĖGINĖS ĮRANGOS DUOMENYS
INFORMATION ABOUT PRESSURE EQUIPMENT
Įrangos tipas: Pressure autostabilizer
Description of the type
Identifikacinis ženklas: SSD.A.K.0200-17
Identification mark
Tūris: 1 grupė (1 group)
Fluid
Didžiausias leidžiamas slėgis (P_{PS}, bar): 120,0
(Max. allowable pressure)
Didžiausia leidžiamoji temperatūra (T_{max}, °C): +250
(Max. allowable temperature)
Priedo Nr.: 16/45
Annex No.
Gamintojas arba jo įgaliotas atstovas apie atliktus ar planuojamus atlikti slėginės įrangos projekto pakeitimus privalo informuoti notifikuotą įstaigą – Techninės priežiūros tarnybą bei gauti patvirtinimą, kad sertifikatas teisėtas lieka galioti.
The manufacturer or his authorized representative must inform Notified Body – Technical Supervision Service- of any previous or planned changes in the design of pressure equipment, and obtain a confirmation that the certificate remains valid.
Sertifikatas galioja iki: 2026 09 26
Certificate is valid until: 26 09 2026
Techninės priežiūros tarnybos direktoriaus pavaduotojas: Nerijus Nikalauskas
Technical supervision service deputy director
Išduotas data: 2016-09-26
(date of issue)


ТАМОЖЕННЫЙ СОЮЗ
EAC
СЕРТИФИКАТ СООТВЕТСТВИЯ
№ ТС RU C-RU.МХ12.В.00003
Серия RU № 0037193
ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации продукции ООО "Сертификационный центр "МосЦКБА". Адрес: 107031, город Москва, улица Рождественка, дом 5/7, строение 2, Фактический адрес: 115093, город Москва, улица Щипок, дом 18, строение 1, Телефон: +74955172292, Факс: +74992356790, Аттестат рег.№ RA.RU.11МХ12, 02.03.2015
ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью, "ТехПромАрма", Адрес: 109377, РОССИЯ, город Москва, 4-я Новокузьминская улица, дом 12, строение 1, Фактический адрес: 115093, РОССИЯ, город Москва, улица Щипок, дом 18, строение 1, ОГРН: 1057748421809, Телефон: +74959557887, Факс: +74959557887, адрес электронной почты: tpa@tehpromarma.ru
ИЗГОТОВИТЕЛЬ Общество с ограниченной ответственностью, "ТехПромАрма", Адрес: 109377, РОССИЯ, город Москва, 4-я Новокузьминская улица, дом 12, строение 1, Фактический адрес: 115093, РОССИЯ, город Москва, улица Щипок, дом 18, строение 1, ОГРН: 1057748421609, Телефон: +74959557887, Факс: +74959557887, адрес электронной почты: tpa@tehpromarma.ru
ПРОДУКЦИЯ Самозатбалансированы давления DN6-900 Pp10-450, DN1000-2000 Pp10-120, ТУ 3790-011-78976334-2015, Серийный выпуск
КОД ТН ВЭД ТС 8481809907
СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 010/2011 "О безопасности машин и оборудования"
СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ Протокола сертификационных испытаний № ПЗ06-0047 от 20.08.2016г. Испытательной лаборатории Ассоциации экспертов по сертификации и испытаниям продукции "Сертификационный центр "НАСТХОР", аттестат аккредитации № РОСС RU.0001.21ПЗ06 от 17.02.2016, акта с результатами анализа состояния производства от 06.06.2016г., обоснования безопасности СОДЛ.01.ОБ, паспортов оборудования, руководства по эксплуатации СОДЛ.ТЧ.К РЭ, конструкторской документации, технических расчетов, документов, подтверждающих соответствие материалов и комплектующих изделий, документов, подтверждающих аттестацию технологии сварки, сварочных материалов и специалистов сварочного производства, документов, подтверждающих квалификацию специалистов неразрушающего контроля; сертификата соответствия системы менеджмента качества ГОСТ ISO 9001:2008 № 15.0819.026 от 06.07.2015г., действительно до 06.07.2018г., выдан Ассоциацией по сертификации "Русский Регистр" № РОСС RU.0001.21ПЭ45
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Условия хранения в соответствии с ГОСТ 15150-69. Срок хранения 3 года. Срок службы 50 лет.
Схема сертификации 1с.
СРОК ДЕЙСТВИЯ С 10.10.2016 ПО 09.10.2021 ВКЛЮЧИТЕЛЬНО
М.П. Руководитель (уполномоченное лицо) органа по сертификации Логинова Л.Н.
Эксперт (эксперт-аудитор) Зитвицкий А.Р.


ТАМОЖЕННЫЙ СОЮЗ
EAC
СЕРТИФИКАТ СООТВЕТСТВИЯ
№ ТС RU C-RU.МХ12.В.00004
Серия RU № 0037194
ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации продукции ООО "Сертификационный центр "МосЦКБА". Адрес: 107031, город Москва, улица Рождественка, дом 5/7, строение 2, Фактический адрес: 115093, город Москва, улица Щипок, дом 18, строение 1, Телефон: +74955172292, Факс: +74992356790, Аттестат рег.№ RA.RU.11МХ12, 02.03.2015
ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью, "ТехПромАрма", Адрес: 109377, РОССИЯ, город Москва, 4-я Новокузьминская улица, дом 12, строение 1, Фактический адрес: 115093, РОССИЯ, город Москва, улица Щипок, дом 18, строение 1, ОГРН: 1057748421809, Телефон: +74959557887, Факс: +74959557887, адрес электронной почты: tpa@tehpromarma.ru
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ПРОДУКЦИЯ Предохранительные устройства: самозатбалансированы давления DN6-900 Pp10-450, DN1000-2000 Pp10-120, ТУ 3790-011-78976334-2015, Серийный выпуск
КОД ТН ВЭД ТС 8481809907
СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 032/2013 "О безопасности оборудования, работающего под избыточным давлением"
СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ Протокола сертификационных испытаний № ПЗ06-0047 от 20.08.2016г. Испытательной лаборатории Ассоциации экспертов по сертификации и испытаниям продукции "Сертификационный центр "НАСТХОР", аттестат аккредитации № РОСС RU.0001.21ПЗ06 от 17.02.2016, акта с результатами анализа состояния производства от 06.06.2016г., обоснования безопасности СОДЛ.01.ОБ, паспортов оборудования, руководства по эксплуатации СОДЛ.ТЧ.К РЭ, конструкторской документации, технических расчетов, документов, подтверждающих соответствие материалов и комплектующих изделий, документов, подтверждающих аттестацию технологии сварки, сварочных материалов и специалистов сварочного производства, документов, подтверждающих квалификацию специалистов неразрушающего контроля; сертификата соответствия системы менеджмента качества ГОСТ ISO 9001:2008 № 15.0819.026 от 06.07.2015г., действительно до 06.07.2018г., выдан Ассоциацией по сертификации "Русский Регистр" № РОСС RU.0001.21ПЭ45
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Условия хранения в соответствии с ГОСТ 15150-69. Срок хранения 3 года. Срок службы 50 лет.
Схема сертификации 1с.
СРОК ДЕЙСТВИЯ С 10.10.2016 ПО 09.10.2021 ВКЛЮЧИТЕЛЬНО
М.П. Руководитель (уполномоченное лицо) органа по сертификации Логинова Л.Н.
Эксперт (эксперт-аудитор) Зитвицкий А.Р.

PATENTS


ЕВРАЗИЙСКАЯ ПАТЕНТНАЯ ОРГАНИЗАЦИЯ
ЕВРАЗИЙСКОЕ ПАТЕНТНОЕ ВЕДОМСТВО
ЕВРАЗИЙСКИЙ ПАТЕНТ
ЕВРАЗИЙСКИЙ ПАТЕНТ
№ 026034
Название изобретения:
«СПОСОБ САМОГАШЕНИЯ УДАРНЫХ ИМПУЛЬСОВ ТРАНСПОРТИРУЕМОЙ СРЕДЫ В МАГИСТРАЛЬНОМ ПРОДУКТОПРОВОДЕ»
Патентовладелец (лицо):
ОБЩЕСТВО С ОГРАНИЧЕННОЙ ОТВЕТСТВЕННОСТЬЮ "ТЕХПРОМАРМА" (RU)
Изобретатель (и):
Поступов Виталий Альфредович (RU)
Заявка №: 201500003
Приоритет изобретения:
Дата подачи заявки: 30 сентября 2013 г.
Дата выдачи патента: 28 февраля 2017 г.
ТЛЕВЛЕСОВА Сауле Январбековна
Президент Евразийского патентного ведомства

The Eurasian Patent


Communication under Rule 71(3) EPC
1. Intention to grant
You are informed that the examining division intends to grant a European patent on the basis of the above application, with the text and drawings and the related bibliographic data as indicated below.
A copy of the relevant documents is enclosed.
1.1
In the text for the Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Description, Pages
1-12 filed in electronic form on 22-09-2017
Claims, Numbers
1-3 filed in electronic form on 22-09-2017
Drawings, Sheets
1/4-4/4 filed in electronic form on 22-09-2017
With the following amendments to the above-mentioned documents proposed by the division
Description, Pages 3, 4, 8, 9
Claims, Numbers 1, 2
Registered letter

European Patent Organisation makes a desision to grant the European Patent


The United States of America
The Director of the United States Patent and Trademark Office
Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.
Therefore, this
United States Patent
Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.
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