

Zeparo Z10



Automatic air vents and separators

Microbubble, dirt and magnetite separator, Industrial type

*Engineering
GREAT Solutions*

Zeparo ZIO

For applications of all sizes, the Zeparo range offers a complete, reliable solution for problems with air and sludge in heating, solar and chilled water systems – from initial venting to the separation of the tiniest and finest magnetite particles. The helistill separator makes these products incredibly efficient. The Zeparo Industrial have been specially developed to meet the high demands of large installations, and they have one objective: to achieve an air-free, sludgefree installation without the use of filters, which become clogged or require regular maintenance.



Key features

> Cleans and protects the installation

Protects critical investments from malfunction and even failure due to dirt, such as boilers, pumps, valves, chillers, and calorimeters. No clogging risk. Reduces maintenance of equipment needed over system lifetime and associated costs.

> Magnet Accessory

Optimizes separation efficiency even further for sludge and magnetite (black iron oxide) deposits which consist of finer magnetic particles. Easy handling and cleaning.

Technical description

Application:

Heating, solar and chilled water systems.

Media:

Non-aggressive and non-toxic system media.
Addition of antifreeze agent up to 50%.

Pressure:

Max. admissible pressure, PS:
10 bar / 16 bar - see Articles
Min. admissible pressure, PSmin: 0 bar

Temperature:

Max. admissible temperature, TS:
PN10: 110°C
PN16: 160°C
Min. admissible temperature, TSmin:
PN10, PN16: -10°C

Material:

Steel. Color beryllium.

Connection:

Flanges according to EN 1092-1.

Standard:

Constructed according to
PED 2014/68/EU.

Transportation and storage:

In frostless, dry places.

Volumes and Flows

DN	VN [l]	qN [m ³ /h]	qN _{max} [m ³ /h]
ZIO...F			
50	7	11	25
65	7	19	42
80	16	26	65
100	17	44	100
125	27	67	155
150	51	95	222
200	110	170	395
250	210	306	618
300	370	435	890
350	461	575	1040
400	750	750	1350
450	974	945	1680
500	1249	1160	2230
600	3098	1685	3440

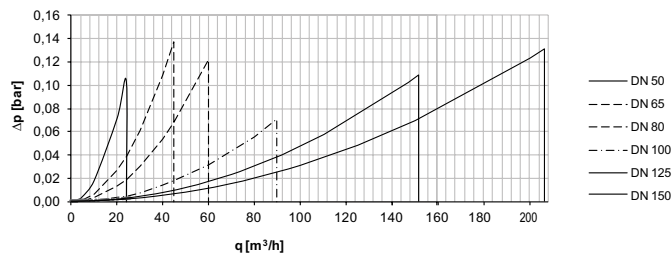
VN = Nominal volume
qN = Nominal flow/flow rate
qN_{max} = Maximum flow

Diagrams

Approx. pressure loss (Δp) – Separator

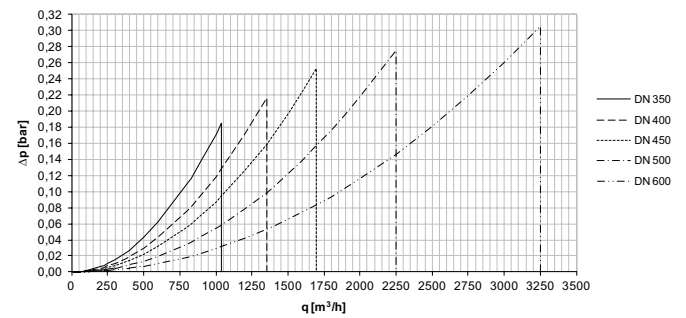
Zeparo ZIO

DN 50 – DN 150



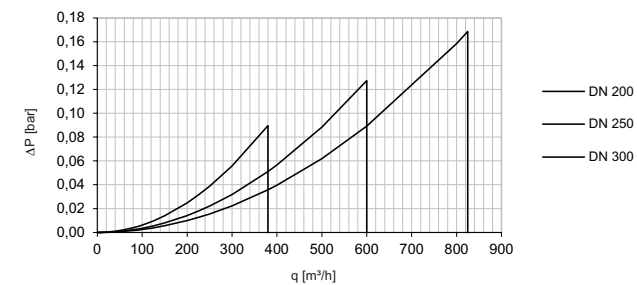
Zeparo ZIO

DN 350 – DN 600



Zeparo ZIO

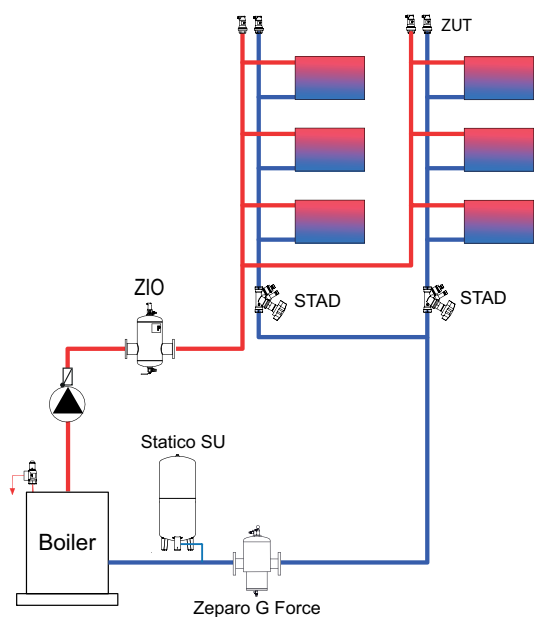
DN 200 – DN 300



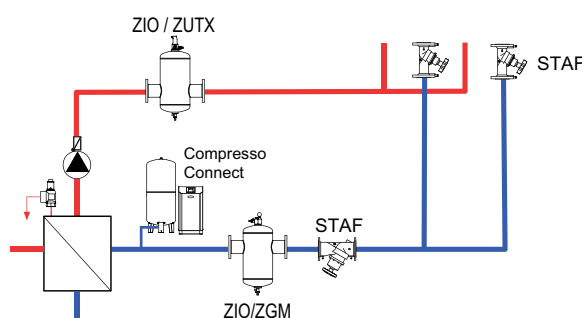
Zeparo DN 200 – DN 600 operation is limited to:
Continuous flow \leq qN
Intermittent flow \leq qN_{max}

Application examples

System with boiler



System with heat exchanger



Zeparo ZIO

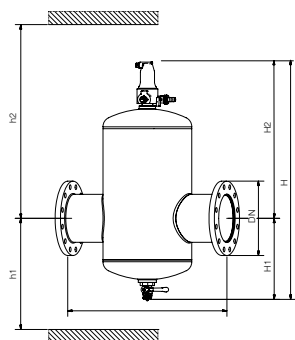
Zeparo ZIO DN 50-150

Industrial type.

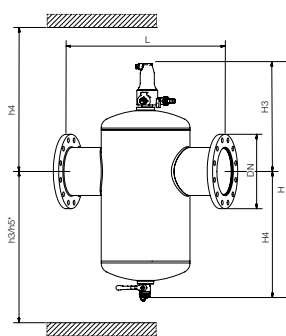
Flanged connection. Horizontal installation.

Dirt or microbubble separator.

Zeparo ZIO from DN 50 to DN 150 are equipped with one air separator ZUTX and one drain ball valve.



Separator for micro bubbles



Separator for dirt

PN 10

Type	DN	H	h1	h2	h3	h4	h5*	H1	H2	H3	H4	L	q_{nom} [m ³ /h]	q_{max} [m ³ /h]	m [kg]	EAN	Article No
ZIO 50F	50	646	264	452	426	290	596	299	417	255	391	350	11	25	16	7640148633062	788 2050
ZIO 65F	65	646	264	452	426	290	596	299	417	255	391	350	19	42	18	7640148633079	788 2065
ZIO 80F	80	759	295	534	508	321	663	260	499	286	473	470	26	65	26	7640148633086	788 2080
ZIO 100F	100	759	295	534	508	321	663	260	499	286	473	475	44	100	29	7640148633093	788 2100
ZIO 125F	125	961	410	621	595	436	765	375	586	401	560	635	67	155	52	7640148633109	788 2125
ZIO 150F	150	961	410	621	595	436	765	375	586	401	560	635	95	222	56	7640148633116	788 2150

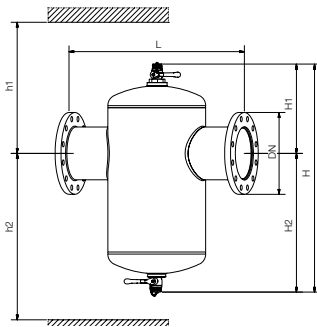
*) Length for mounting the magnetic bar

Zeparo ZIO DN 200-600

Industrial type.

Flanged connection. Horizontal installation.

Dirt and microbubble separator. Equipped with two ball valves for draining and air vent.


PN 10

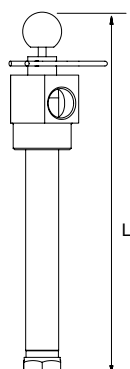
Type	DN	H	H1	H2	h1	h2	L	q_{nom} [m ³ /h]	q_{max} [m ³ /h]	m [kg]	EAN	Article No
ZIO 200F	200	1115	455	660	805	910	775	170	395	95	7640161636637	303020-51500
ZIO 250F	250	1315	480	835	830	1085	890	306	618	139	7640161636644	303020-51600
ZIO 300F	300	1315	520	795	870	1045	1005	435	890	157	7640161636651	303020-51700
ZIO 350F	350	1660	600	1060	950	1310	1050	575	1040	265	7640161636668	303020-51800
ZIO 400F	400	1660	626	1034	976	1284	1150	750	1350	305	7640161636675	303020-51900
ZIO 450F	450	2085	725	1360	1075	1610	1450	945	1680	515	7640161636682	303020-52000
ZIO 500F	500	2085	750	1335	1100	1584	1600	1160	2230	590	7640161636699	303020-52100
ZIO 600F	600	2655	985	1670	1335	1920	1800	1685	3440	720	7640161636705	303020-52200

PN 16

Type	DN	H	H1	H2	h1	h2	L	q_{nom} [m ³ /h]	q_{max} [m ³ /h]	m [kg]	EAN	Article No
ZIO 350F	350	1660	615	1045	965	1295	1050	575	1040	415	7640161628571	793 6350
ZIO 400F	400	2080	710	1370	1060	1620	1150	750	1350	695	7640161628588	793 6400
ZIO 450F	450	2180	735	1445	1085	1695	1450	945	1680	860	7640161628595	793 6450
ZIO 500F	500	2510	865	1645	1215	1895	1600	1160	2230	1035	7640161628601	793 6500
ZIO 600F	600	2955	1000	1955	1350	2205	1800	1685	3440	1750	7640161628618	793 6600

Applications TS > 110 °C, PS > 10 bar upon request.

Accessories for separators



Zeparo ZIMA/ZGM

Magnet Attachment. For retrofitting to mounting on site in the Zeparo ZIO range. T-branch with magnetic rod and pocket. To increase the magnetite capture.

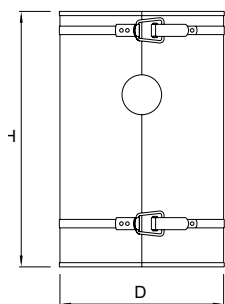
Typ	m [kg]	L	EAN	Artikel-Nr.
ZIMA 50-100	3,0	380	7640148633604	788 0100
ZIMA 125-00	4,3	497	7640148633611	788 0200
ZIMA 250	5,4	720	7640161634794	788 0250
ZIMA 300/350	6,3	940	7640161636965	788 0300
ZIMA 400/600	7,1	1165	7640161636972	788 0400

Thermal insulation

Rockwool 2 part galvanized steel cladding, easy to fit with toggle clamps. Insulation value approx. 0.040 W/mK. Fire rating A2 to DIN 4102.

Zeparo ZHI

Thermal insulation for Zeparo ZIO. Heating water systems.



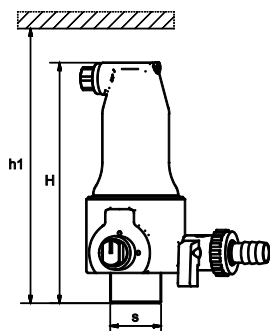
Type	DN	D	H	SD*	m [kg]	EAN	Article No
ZHI 50/65 ZIO	50/60	278	405	50	3,7	7640148633642	787 2065
ZHI 80/100 ZIO	80/100	349	515	60	7,3	7640148633659	787 2100
ZHI 125/150 ZIO	125/150	453	716	60	14,4	7640148633666	787 2150

*) Insulation thickness

Automatic air vent, version Top

Zeparo ZUTX eXtra-lockable

Male thread. Vertical installation. For automatic air vent of Zeparo ZIO DN 200 - DN 600



Type	H	h1	m [kg]	S	dpu [bar]	EAN	Article No
ZUTX 25	159	184	1,3	R1	10	7640148632485	789 1325

dpu = Working pressure range
Pressure class reduced to PN 10 when ZUT

