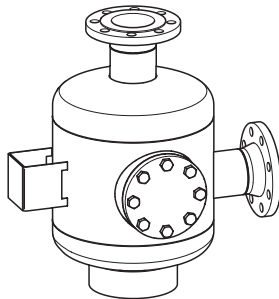


DN 15 – 80 (½" – 3")



DN 100 (4")

Condensate dampening pot

ED

PN 16, PN 40

DN 15 – 100 (½" – 4")

Description

The ED condensate dampening pot is installed in steam and condensate systems.

The equipment is used for lifting the condensate from steam to more elevated condensate mains, quietly and without water hammer.

The equipment may only be used within the admissible pressure and temperature limits, with due consideration of chemical and corrosive influences.

Improper use also includes using equipment made of materials that are unsuitable for the medium used.

Function

Rising condensate lines may suffer from water hammer caused by steam bubbles carried over or resulting from flashing.

If these steam bubbles get into sections of the line containing condensate at a much lower temperature, water hammer can occur.

The steam bubbles abruptly implode and considerably reduce in volume as they pass into the liquid state. A vacuum is formed, which is rapidly filled with inflowing condensate, provoking water hammer.

The pot is installed at the lowest point of the pipeline. It takes in condensate and acts as a buffer that intercepts water hammer.

The condensate inlet and outlet are arranged so that a dampening cushion, consisting of the air and steam bubbles carried over, forms in the upper part of the pot when the plant is started up. In the lower part of the pot, condensate stays and acts as a sealing liquid. The pressure in the pot forces the onward flowing condensate into the more elevated condensate main.

Designed in accordance with the AD 2000 Code of Practice, EN 13445 (available on request)

Manufactured and tested in accordance with the Pressure Equipment Directive PED 2014/68/EU.

Material

- Welded sheet steel
- Welded stainless steel (1.4571)

	Steel	Stainless steel
Flange	1.0460 (P250GH+N)	1.4571 (X6CrNiMoTi17-12-2)
Base	1.0425 (P265GH)	1.4571 (X6CrNiMoTi17-12-2)
Pipe (jacket)	1.0345 (P235GH+N)	1.4571 (X6CrNiMoTi17-12-2)
Pipe (standpipe)	1.0345 (P235GH+N)	1.4571 (X6CrNiMoTi17-12-2)
Pipe (foot)	1.0345 (P235GH+N)	1.4571 (X6CrNiMoTi17-12-2)

Connections

- Flange PN 16, B1 (EN 1092-1)
- Flange PN 40, B1 (EN 1092-1)

Optional extras

- Drain

Pressure and temperature ratings

Flange	Material	PN	DN	Max. admissible pressure [bar]	Max. admissible temperature [°C]
ED	Steel	40	15 - 100	18	250
ED	Steel	16	65 - 100	12	200
ED	Steel	16	65 - 80	8	200
ED	Steel	16	100	4	200
ED	Stainless steel	40	15 - 100	18	250

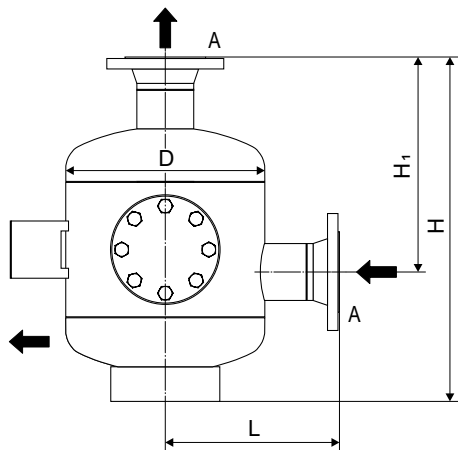
Admissible minimum temperature: – 10 °C

Condensate dampening pot

ED

PN 16, PN 40

DN 15 – 100 (½" – 4")



Application of European Directives

Pressure Equipment Directive

The equipment conforms to this directive and can be used for the following fluids:

■ Group 2 fluids

ATEX Directive

The equipment does not have its own potential ignition source and is therefore not subject to this directive.

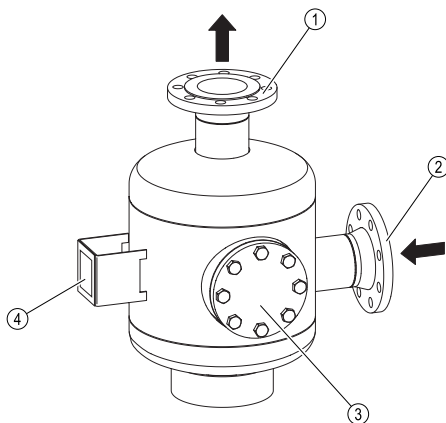
Static electricity: Once installed, static electricity may arise between the equipment and the connected system.

If used in potentially explosive atmospheres, the plant manufacturer or owner is responsible for discharging or preventing possible static charge.

If it is possible for fluid to escape, e.g. through actuating mechanisms or leaks in threaded joints, the plant manufacturer or owner must take this into consideration when dividing the area into zones.

Please note our general terms of business.

Overview of ED equipment

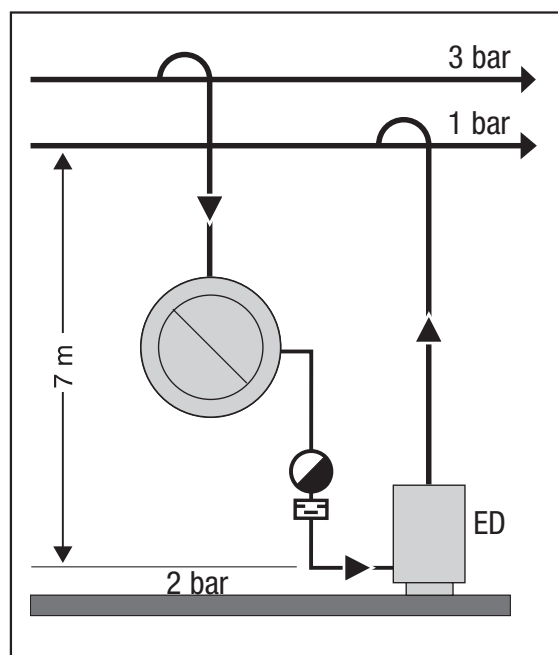


No.	Designation
1	Condensate outlet connection
2	Condensate inlet connection
3	Inspection hole (only available in condensate dampening pots with a volume of ≥ 50 l)
4	Name plate

Dimensions and weights

Volume	[l]	4			9			25		50
A (DN)	[mm]	15	20	25	32	40	50	65	80	100
A (DN)	[inch]	½	¾	1	1¼	1½	2	2½	3	4
D	[mm]	180			219			273		400
H	[mm]	388			454			634		694
H1	[mm]	240			275			430		430
L	[mm]	184			210			237		350
Weight	[kg]	10	10	10	21	21	21	50	50	70

Schematic diagram



The condensate is pushed up to a higher level

1 bar \approx 7 m lift of hot condensate
 + 1 bar pressure in condensate main
2 bar pressure upstream of steam trap

3 bar pressure downstream of steam trap
 – 2 bar pressure upstream of steam trap
1 bar differential pressure (working pressure)

GESTRA AG

Münchener Straße 77, 28215 Bremen, Germany
 Tel. +49 421 3503-0, Fax +49 421 3503-393
 e-mail info@de.gestra.com, Web www.gestra.com

