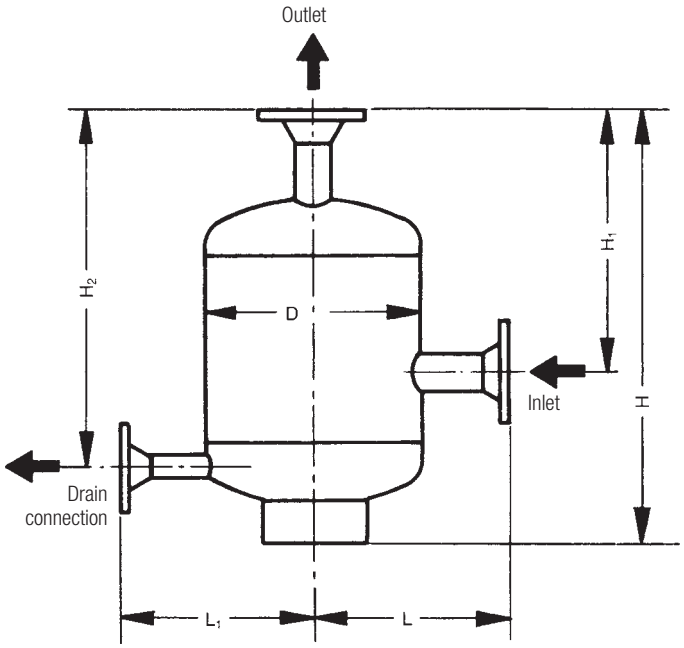

Volume	Litre	4			9			25		50
Sizes inlet and outlet	[mm]	15	20	25	32	40	50	65	80	100
	[in]	½	¾	1	1¼	1½	2	2½	3	4
Dimensions [mm]	H	384	384	384	450	450	450	630	630	690
	H_1	240	240	240	275	275	275	430	430	430
	H_2	325	325	325	370	370	370	540	540	575
	L	180	180	180	210	210	210	240	240	350
	L_1	180	180	180	210	210	210	240	240	350
	D	180	180	180	219	219	219	273	273	400
Sizes drain connection	[mm]	15	15	15	20	20	20	20	20	20
	[in]	½	½	½	¾	¾	¾	¾	¾	¾
Approx. weight	[kg]	10	10	10	21	21	21	50	50	70

Condensate Dampening Pot
ED
PN 40
DN 15 – 100 (½" – 4")

Description

The condensate dampening pot provides a cushioning effect to neutralize waterhammer. The condensate is discharged without noise.

Pressure / Temperature Rating

Service pressure [barg] / [psig]	18
Related temperature [°C]	250

Materials

- Welded steel plate
- Stainless steel (1.4571), welded

Design

Vessel with inlet, outlet and drain connection. Drain connection turned through 180° in relation to inlet.

Connections

Flanged to EN 1092-1, PN 40.

Design and sizing in accordance with AD 2000 Bulletin

Pressure Equipment Directive

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

- Fluids of group 1 and 2

ATEX Directive

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

Static electricity: Static electricity can be produced in the system if the equipment is installed between pipe flanges.

If the equipment is used in potentially explosive atmospheres, the discharge or prevention of possible electrostatic charging is the responsibility of the manufacturer or operator of the system.

Condensate Dampening Pot
ED
PN 40
DN 15 – 100 (½" – 4")

Description

In steam and condensate systems it is quite often inevitable that heat exchangers are installed at a lower level than the condensate main so that the condensate has to be lifted. This is always the case if the condensate main is fitted in an elevated position or if the condensate line has to bridge a door or a street. In these cases the differential pressure*) (pressure upstream minus pressure downstream of steam trap) is reduced by approx. 1 bar for 7 m (or 2 psi for 3 feet) in lift. Figure 1 gives a typical example. The pressure drop across the heat exchanger is not considered.

Without the condensate dampening pot waterhammer would occur in rising condensate lines. Waterhammer is caused if steam bubbles formed by steam carried over or by flashing of a proportion of the condensate into steam come into contact with condensate at a much lower temperature. The steam bubble implodes and considerably reduces its volume in passing into the liquid state. A sudden vacuum is formed and filled rapidly by inflowing condensate. The impact of the water plugs causes shocks and waterhammer.

The remedy is to fit a condensate dampening pot damping out any shock by the air and flash-steam cushion formed in the pot. The condensate dampening pot is always installed at the lowest point of the pipeline. The inlet and outlet connections are arranged so that, in the upper part of the pot, during start-up of the plant, a dampening cushion is formed by the air and steam bubbles carried over; while in the lower part of the pot, condensate will stay and act as sealing liquid. All condensate flowing in is pushed into the elevated condensate main, i.e. the differential pressure must be high enough to surmount the pressure head and the pipeline resistance.

The condensate dampening pot ensures noiseless condensate discharge even in elevated pipelines. Pipelines and valves are not subjected to additional stress by waterhammer. Simultaneously, the condensate dampening pot ensures more steady conditions downstream of the steam trap resulting in improved condensate discharge from the heat exchanger.

*) For further details concerning the capacity of the steam traps as a function of the differential pressure see corresponding data sheets.

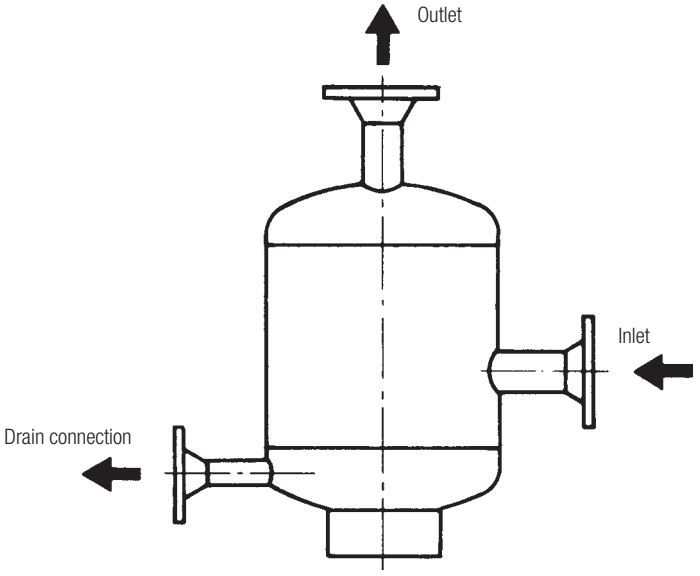

Fig. 2: *GESTRA condensate dampening pot type ED*

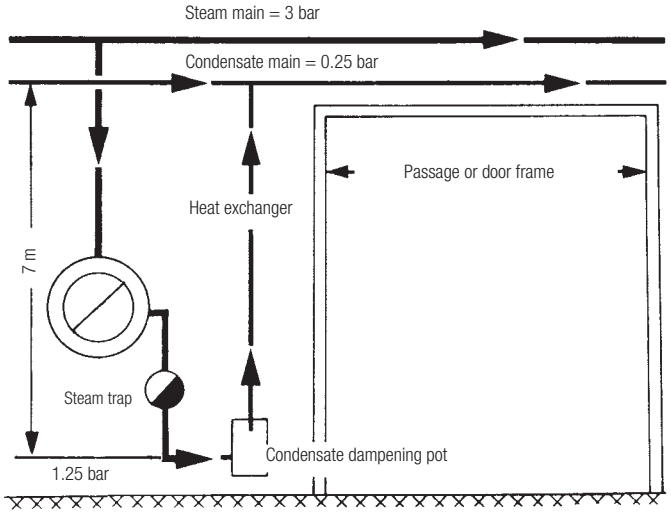

Fig. 1

Pressure in steam line **upstream of steam trap** ....3.00 bar
less pressure downstream of steam trap, consisting of
pressure in condensate main .....= 0.25 bar
plus 7 m of lift corresponding to.....= 1.00 bar ....1.25 bar
= **differential pressure** (working pressure) ....1.75 bar

Supply in accordance with our general terms of business.

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