

## EMCO Condensing Chamber Unit Type VK 420 for Level Measurement

### Application

The EMCO condensing chamber unit is in connection with a differential pressure transmitter designed for level measurement in boiler drums of higher pressure.

### Construction

The EMCO condensing chamber unit consists of a Condensing pot, 2 vertical tubes, a T-drilled piece, and 2 branch sockets. The Centre to Centre distance is to be chosen wider than the measuring span.

The condensing pot is not to be insulated ensuring that the steam will condensate in the pot. The liquid level will correspond to the height of the upper branch socket. The bended vertical tube is consequently fully contained with water.

The liquid level in the boiler is also created in the straight tube.

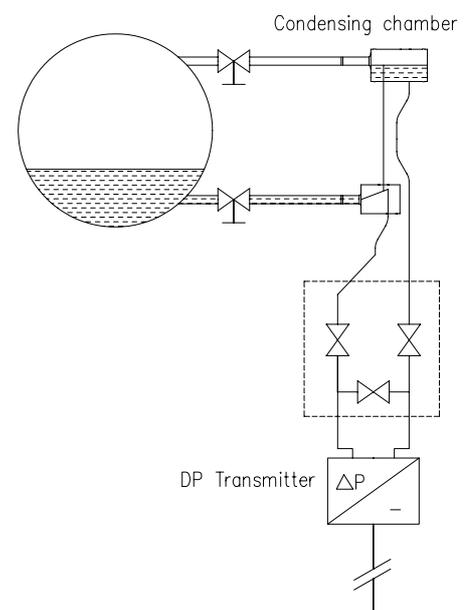
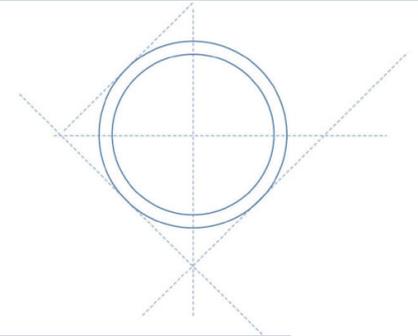
The level measurement is produced by measuring the hydrostatic pressure differential between the 2 legs.

In order to obtain higher measuring accuracy at higher temperatures one tube is bended in order to be close to the other tube to ascertain the same temperature in both tubes, due to the fact that the density of water varies with the temperature.

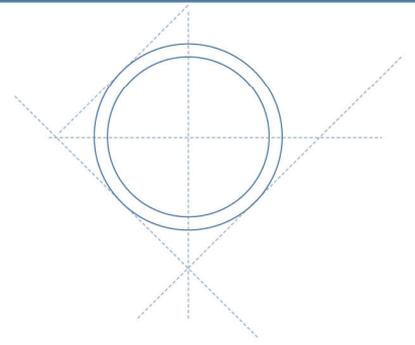
It is recommended to insulate the 2 legs between the condensing pot and the T-piece.

The bore in the T-piece is inclined in order to ensure that sediment is returned to the boiler.

The condensing pot is provided with a flanged filling point.



0-02-006-3e



## Technical Data

Materials	: Carbon steel, heat resistant steels P235GH, 16Mo3, 13CrMo4-5, A106, A335 P1, P11, A182 F1, F11, etc.
Pressure rating	: PN 25 - 250 Class 300 - 1500
Temperature	: 500 °C
Connection	
Drum	: 1" butt weld ends, flanged or socket weld ends
Instrument	: ½" butt weld ends, socket weld ends OD 12 mm, OD 14 mm or flanged
Max. distance between drum connections (L)	: 2000 mm
Material certificate	: According to EN 10204 - 3.1
Advantages	: More calm liquid level, same liquid temperature resulting in higher accuracy.
Design	: Fully in compliance with PED 97/23EC

