

Balancing vessels for liquid level measurement

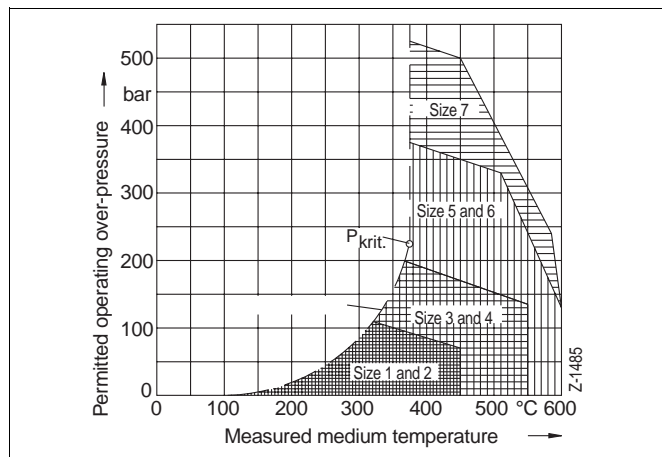
For the measurement of liquid levels on boilers by means of a differential pressure gauge, a fitting is required, in which the condensate reference column required for the measurement is formed. The fitting consists of a single balancing vessel with a welded T-fitting for the upper sampling and a separate, loosely packed, T-fitting for the lower sampling.

The connecting tube between the upper and lower T-fittings has to be supplied by the customer. It is not part of the ABB installation material, but has to be supplied and welded on by the respective boiler manufacturer.

Installation and welding work are not included in the scope of delivery.

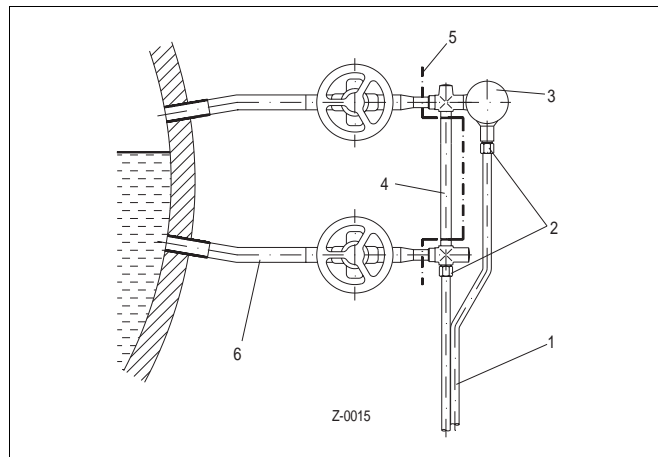
Technical data

The operating range of the fitting has to be determined from the following graph according to the operating data of the measuring point.



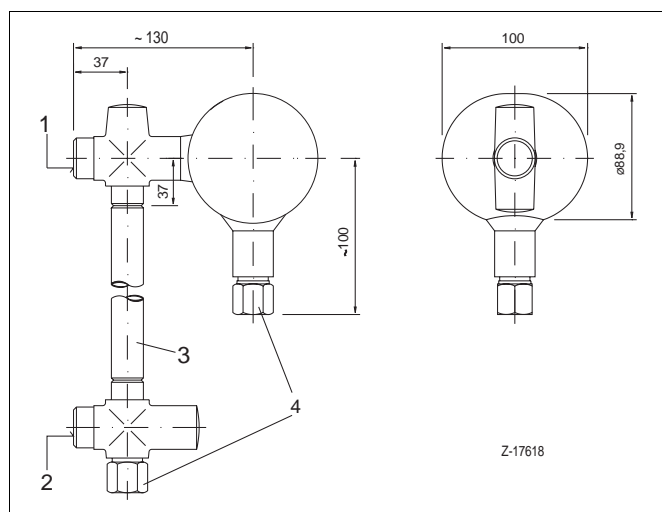
Application for balancing vessels as per DIN 19211

Example of a measuring arrangement for water level measurement on a boiler



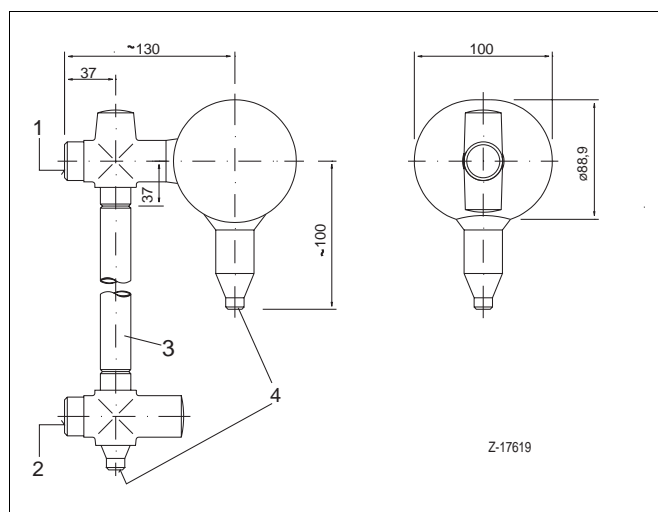
- 1 Differential pressure line
- 2 Non-soldered pipe fitting or welded connection
- 3 Single balancing vessel with T-fitting
- 4 Connecting pipe
- 5 Limit of delivery
- 6 Sampling connections

Dimensional drawings (dimensions in mm)



Size 2, Form B:

- 1 Upper sampling: Welded connection for pipe 31.8 × 3.6
- 2 Lower sampling: Welded connection for pipe 31.8 × 3.6
- 3 Cross connection: Tube 21.3 × 2 (supplied by customer)
- 4 Outlet: Non-soldered pipe fitting with ferrule DS 12 to DIN 2353 for pipe Ø 12 mm



Size 4, Form C:

- 1 Upper sampling: Welded connection for pipe 33.7 × 5
- 2 Lower sampling: Welded connection for pipe 33.7 × 5
- 3 Cross connection: Tube 30 × 5 (supplied by customer)
- 4 Outlet: Welded connection for tube 14 × 2.5

Materials

If required, the vessel (Code No. 301) can be certified with manufacturer's certificate acc. to Section 9 (2) 1. of the Pressurized Containers Ordinance as well as with material certificates acc. to DIN 50049 3.1 A (3.1 B only for T-pieces of C22.3) for the materials used and is thus prepared for a subsequent overall acceptance test by the TÜV (Technical Inspectorate) at the operator's premises.

Size	Form	Housing	Connection	T-fitting
2	B	St 45.8 Mat.-No. 1.0405	St 45.8 Mat.-No. 1.0405	C 22.3 Mat.-No 1.0427
4	C	13CrMo44 Mat.-No. 1.7335	13CrMo44 Mat.-No. 1.7335	13CrMo44 Mat.-No. 1.7335

**Balancing vessels
for liquid level measurement**

10/14-4.51 EN

Ordering information				
Balancing vessel with T-fittings				
	kg approx.	Volume approx.	Catalog No	
Size 2 Form B	3.4	300 cm ³	14940-0859964	
Size 4 Form C	4.5	250 cm ³	14940-0859965	
Additional ordering information				
Manufacturer's certificate and material certificate			14999-07957512	

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3KXF511000R1001

10/14-4.51-EN.01.2011