

BONT® Level Gauges

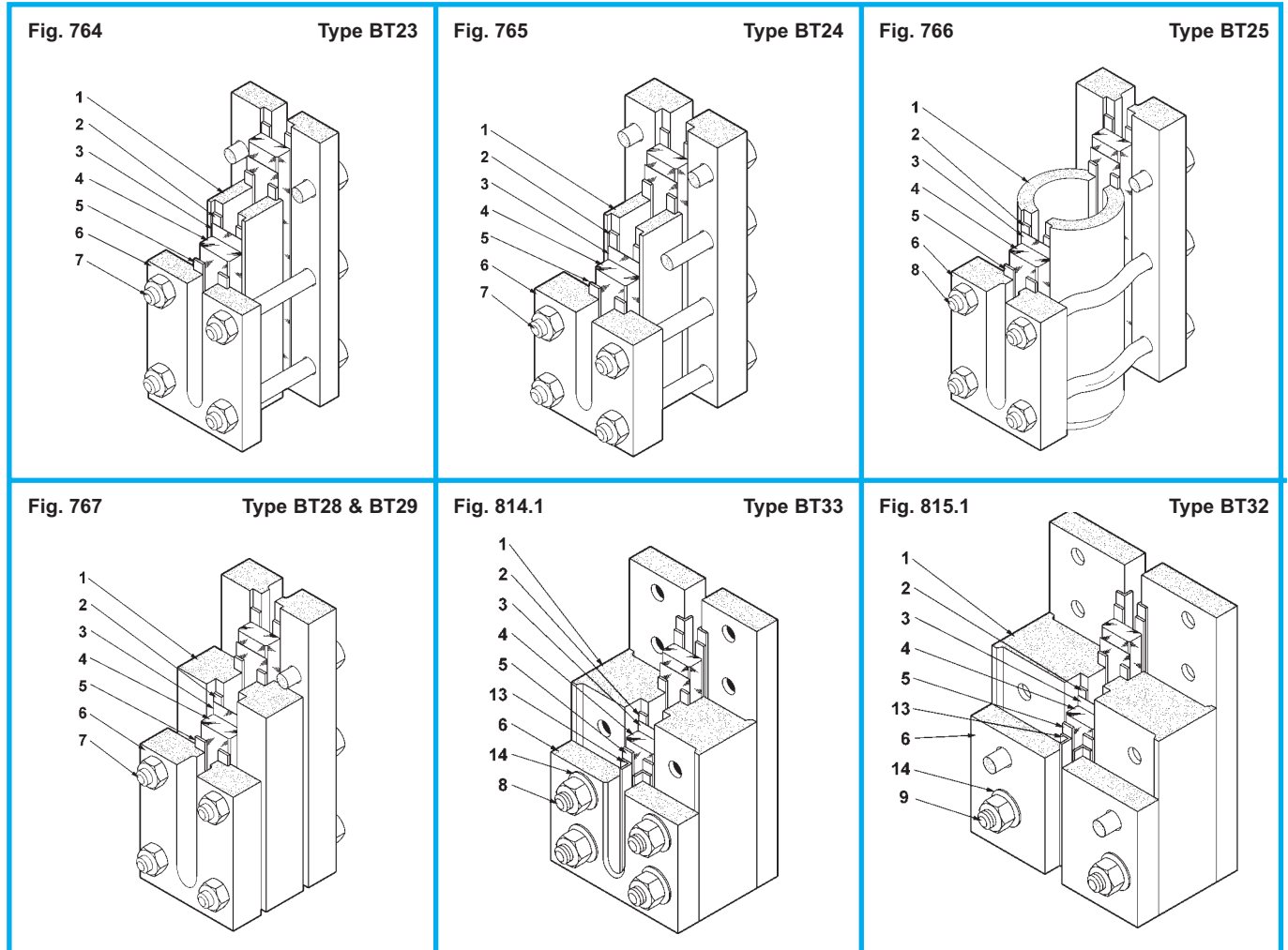
Transparent Gauge Bodies

Description and Maintenance Instructions

Bolting torques

- Type BT23	50 Nm	- Type BT29	80 Nm
- Type BT24	50 Nm	- Type BT33	80 Nm
- Type BT25	40 Nm	- Type BT32	90 Nm
- Type BT28	80 Nm		

1 Centre piece	6 Cover plate
2 Sealing joint	7 Bolt with nut
3 Glass protection sheet (where applicable)	8 Stud bolt with nut
4 Plate glass	9 Stud with nut
5 Cushion joint	13 Angular Piece
	14 Belleville Washer



Service maintenance

Before putting in service, check the bolting torque as recommended on top of this page. Tighten the bolts alternatively, starting from centre of gauge. To avoid glass thermal shocks during start-up, the gauge temperature must gradually increase in order to allow both the metallic structure and the glass to reach the operating temperature. Proceed as follows: close bottom shut-off valve, completely open drain, partially open top shut-off valve to allow a **minimum flow** outlet of steam. Maintain flow outlet until proper temperature is reached, then close drain valve; the condensate coming through top valve will fill the gauge column. At this step completely open **very slowly** bottom shut-off valve, then completely open top shut-off valve.

In case during operation fluid impurities affect glass or protection shield, proceed to gauge washing as above described

Important notice

Maintenance must be made immediately when:

- leakage appears, even if very small. In this case: shut of and cool down the gauge. Tighten the gauge nuts at the recommended bolting torque;
- the glasses appear opaque or slightly white specially in the steam area;
- the reading of the level is not clear.

The lack of maintenance and the lack of replacement of the deteriorated parts can cause the breakage of the glasses with all the relevant consequences.

Dismantling

- Shut off the valves, let out the pressure and remove the level gauge body from the valves.

- Loosen and take out the tightening bolts and remove all component pieces as well.
- Clean the sealing surfaces of the centre piece and the cushion surfaces of the cover plates very carefully, making sure that they are clear of any remnants of joints.
- Smear the threads with a thin layer of graphite grease.

Reassembling

- Fit in new glasses with new joints (never re-use joints which have already been in service!). Remember that the glass protection sheet must be in direct contact with the inner side of the glasses (between the glass and the fluid), and that the sealing joint must be placed on the sealing surface of the centre piece. Reassemble all the other components in the right sequence, and tighten the bolts alternatively, starting from centre of gauge.
- Never grip the level gauge body in a vice during the reassembling, but put it on a plane surface.
- Never use adhesive or hermetic mastic. Remember that all surfaces must be perfectly clean.

Spare parts

- When ordering spare parts please state:
 - type and size of the gauge body
 - item number of the spare part, as shown in the above list
 - construction material.
- As regards plate glasses their joints and protection sheets, remember that each level gauge is fitted with 2 plate glasses type B (section 34x17 mm).

For type BC1 (bicolour), separate instructions on request.