

BONT® Level Gauges

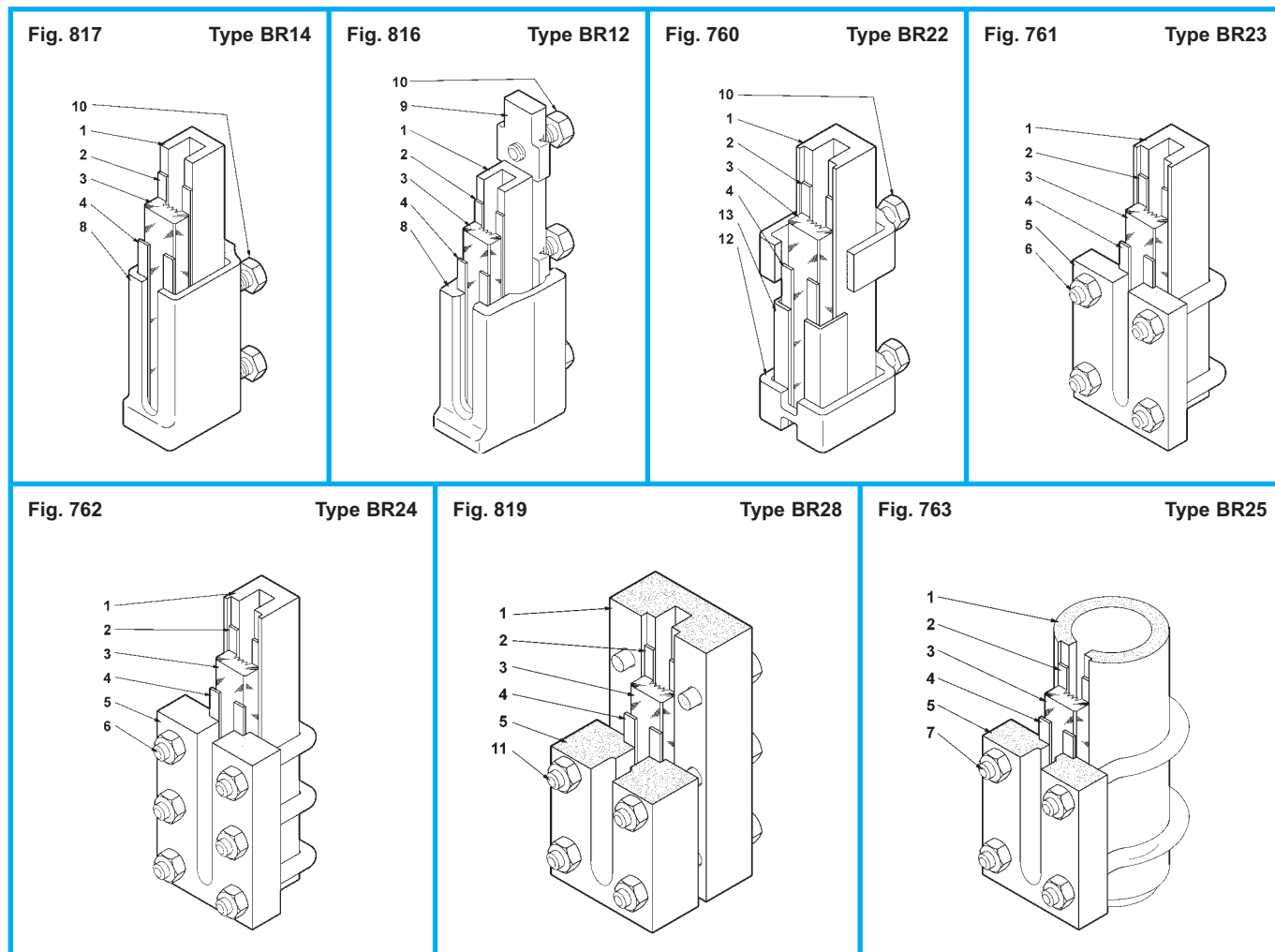
Reflex Gauge Bodies

Description and Maintenance Instructions

Bolting torques

- Type BR14	35 Nm	- Type BR24	50 Nm
- Type BR12	60 Nm	- Type BR28	50 Nm
- Type BR22	30 Nm	- Type BR25	40 Nm
- Type BR23	50 Nm		

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|-------------------------|--------------------|
| 1 Centre piece | 8 Gauge body |
| 2 Sealing joint | 9 Wedge piece |
| 3 Reflex glass | 10 Tightening bolt |
| 4 Cushion joint | 11 Bolt with nut |
| 5 Cover plate | 12 Clamp |
| 6 U stud bolt with nuts | 13 Angular piece |
| 7 O stud bolt with nuts | |



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 page. 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, 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 glass appears opaque or slightly white specially in the steam area;
- grooves of the reflex glass show sign of corrosion and/or erosion and 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 glass with all the relevant consequences.

Dismantling

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

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

Reassembling

- Fit in a new glass with new joints (never re-use joints which have already been in service!): remember that the sealing joint must be placed on the side where the grooves are.
- Reassemble all the components in the right sequence. 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 reflex glasses and their joints, please remember that:
 - each type BR12, BR14 gauge is fitted with 1 reflex glass type A (section 30x17 mm),
 - each type BR22, BR23, BR24, BR25, BR28 gauge is fitted with 1 reflex glass type B (section 34x17 mm).

For type BR13, separate instructions on request.