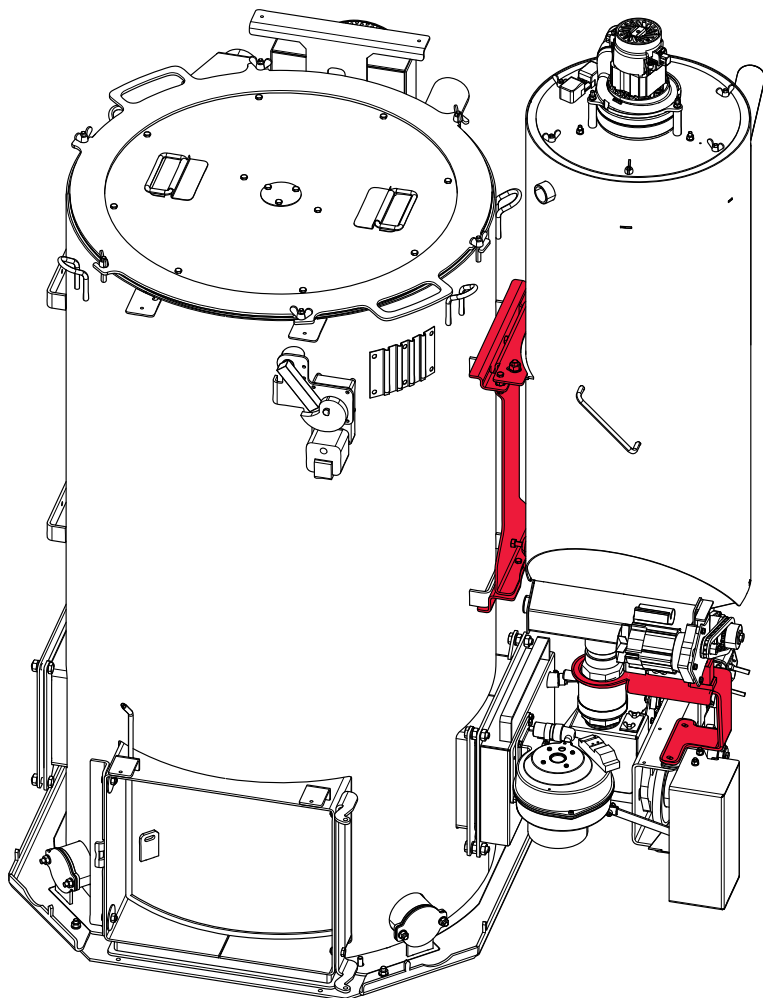


Installation manual Level detection system – hopper

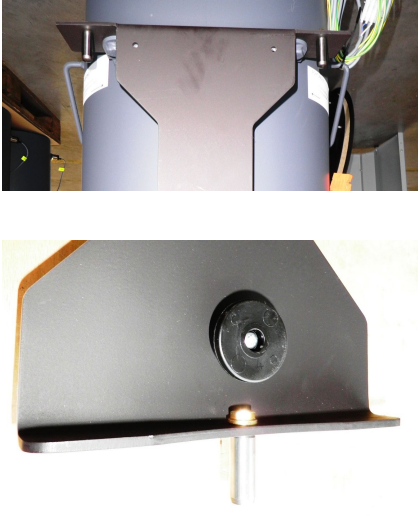
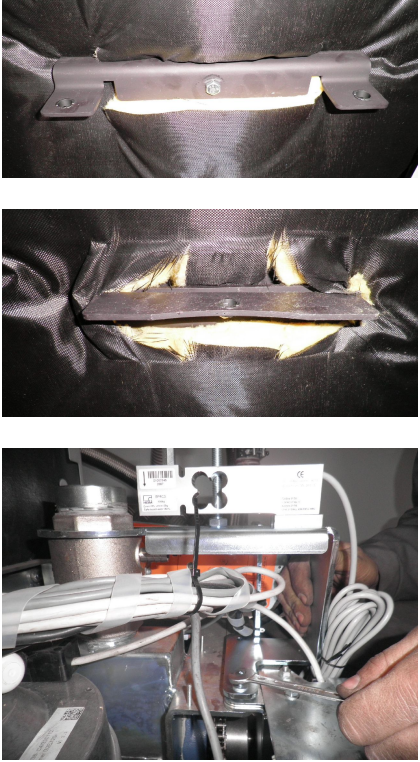

The weighing cell measures the pellet level at the precision of +/- 100 kg. The measured weight at the hopper is subtracted of the amount of stored pellet and the actual pellet level calculated. The threshold value, the minimum weight for a warning message, can be varied. The warning message appears on the operating device and disappears when the filling weight is above the set minimum weight.





Components of the SET hopper level detection system

Designation	Description
Weighing cell	Weighing cell with console for mounting on the burner with connecting cable and mounting bolt.
Top bracket	Bracket for hanging the hopper with mounting bolts.
Bottom bracket	Bracket for the distance between the hopper and the burner.
Base plate	Base plate with spacer for a flexible connection between boiler and hopper.
Rubber connector hose	Rubber connector hose with 2 hose clamps for securing the hose.
Connecting cable	Connecting cable with 2 plugs for the CMP 1.4 or CMP 0.6.
Manual	Installation manual


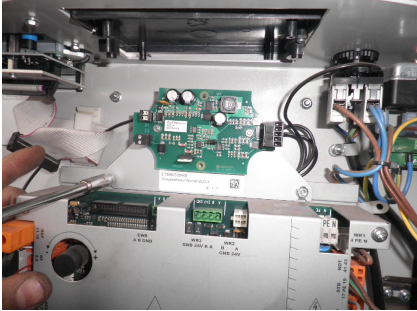
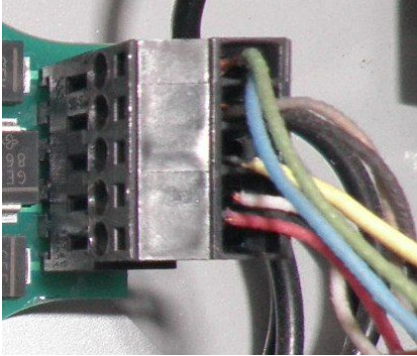
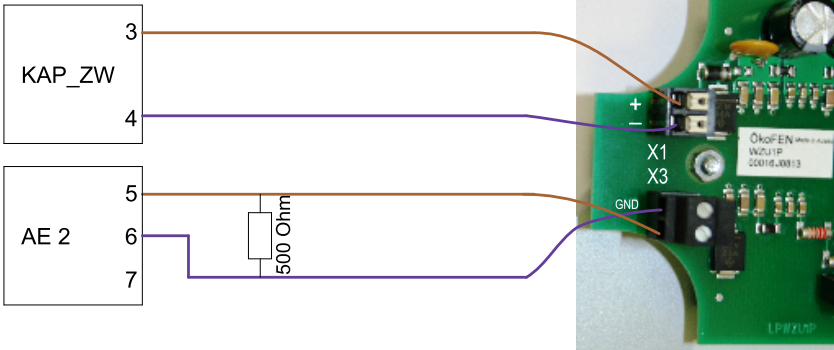

Installation of level detection system

Step	Description	
1	Dismantling of the pellet and air line, the vacuum turbine and the existing hopper. Note Empty the hopper completely before picking up.	
2	Hopper preparation: <ol style="list-style-type: none"> 1. Dismantling of the sleeve (connection to ball valve). 2. Dismantling of the conventional mounting bracket. 3. Removal of the spacer bolts. 4. Mounting of the base plate. 5. Mounting of the spacer on the base plate. 	
3	Pellet boiler preparation: <ol style="list-style-type: none"> 1. Mounting of the top bracket onto the boiler (attach loosely and align horizontally). 2. Mounting of the bottom bracket onto the boiler (attach loosely and align horizontally). 3. Mounting of the weighing cell with console onto the burner, (undo the existing bolts, thread in the positioning ring, mount the console on the burner, fasten in place with the supplied longer bolts). 4. Attachment and rolling back of the rubber connecting hose on the ball valve. 	
4	Hang the hopper in place. Note Take care not to damage the micrometer on the weighing cell. Align the hopper. The hopper must be positioned vertically as centrally as possible over the ball valve and the hopper duct must be smooth-running. Now tighten the mounting bolts on the top and bottom brackets , as well as on the base plate .	


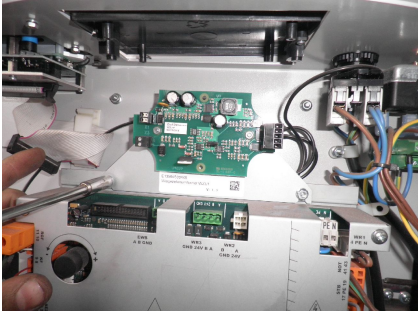
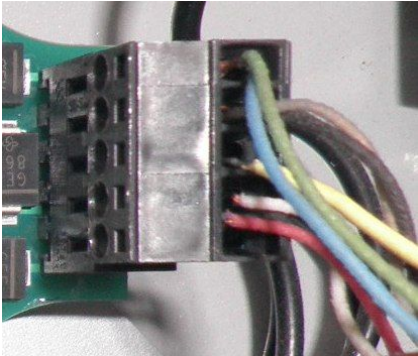
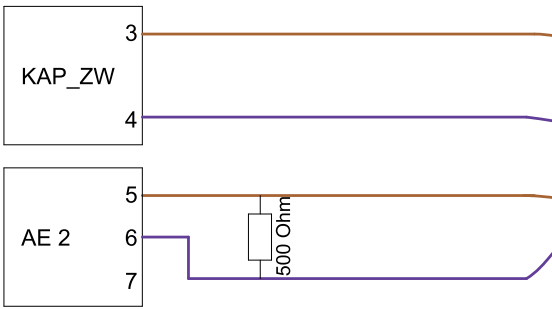
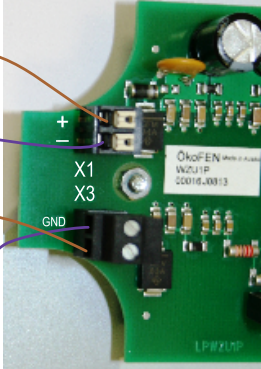
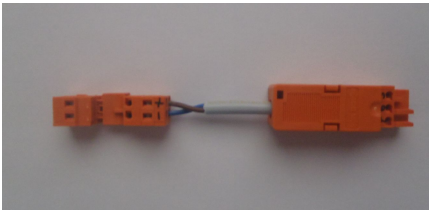
5	<p>The transport securing device (= screw on the weighing cell console) is only used for ex factory mounted weighing cells.</p> <div data-bbox="188 255 948 338" style="background-color: #0070C0; color: white; text-align: center; padding: 5px;">NOTICE</div> <p>Malfunction In the case of weighing cells mounted onto the hopper in the factory, remove the transport securing device prior to initial operation to enable weight measurement.</p>	
6	<p>Pull the rubber connecting hose over the hopper pipe connection and secure it on both sides with the hose clamps.</p>	
7	<p>Mounting of the vacuum turbine and connection of the pellet and air line.</p>	

Electrical connection of the level detection system on the hopper

CMP

Step	Description
1	Dismantling of the front cover panel. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  <h2 style="text-align: center; color: white; background-color: red; display: inline-block; padding: 5px;">DANGER</h2> <p>Electric shock hazard! Disconnect the power supply from the entire heating system before working on the pellet boiler.</p> </div>
2	Mount the weighing cell transducer circuit board between the CMP and the operating device. 
3	Guide the weighing cell connecting cable to the weighing cell transducer circuit board above the CMP. Remove the connected plugs. Take the plug on the weighing cell transducer and connect it to the cable: <ol style="list-style-type: none"> 1. Blue and green (power supply 0–10 Volt) 2. Grey and black (GND) 3. GND 4. White (measuring signal +) 5. Red (measuring signal -) 
4	Establish the power supply via the CMP. Connect the KAP ZW output on the CMP with the terminal X1 (weighing cell transducer): KAP_ZW 3 = + (24 Volt) X1 outer KAP_ZW 4 = - (GND) X1 inside <div style="border: 1px solid black; padding: 5px; margin-top: 10px; background-color: #007bff; color: white;"> <h3 style="text-align: center; margin: 0;">NOTICE</h3> <p style="margin: 0;">Material damage 24 Volt connection (230V destroys weighing cell)</p> </div>
	
5	Establish the connection to the CMP. Connect the AE2 output on the CMP with terminal X3 (weighing cell transducer). AE2 6 = GND X3 inside AE2 5 = Input signal 0–10 Volt X3 outer <p>Note</p> <p>In the case of CMP 06, you must use the supplied plugs with installed ohm resistance.</p> 

Boiler controller FA

Step	Description											
1	Dismantling of the front cover panel. <div style="text-align: center; background-color: red; color: white; padding: 10px; margin: 10px 0;">  <h1 style="margin: 0;">DANGER</h1> </div> <p>Electric shock hazard! Disconnect the power supply from the entire heating system before working on the pellet boiler.</p>											
2	Mount the weighing cell transducer circuit board between boiler control unit and the operating device.											
3	Guide the weighing cell connecting cable to the weighing cell transducer circuit board above the boiler controller. Remove the connected plugs. Take the plug on the weighing cell transducer and connect it to the cable: <ol style="list-style-type: none"> 1. Blue and green (power supply 0–10 Volt) 2. Grey and black (GND) 3. GND 4. White (measuring signal +) 5. Red (measuring signal -) 											
4	Establish the power supply via the boiler controller. Connect the KAP ZW output on the boiler controller with the terminal X1 (weighing cell transducer): KAP_ZW 3 = + (24 Volt) X1 outer KAP_ZW 4 = – (GND) X1 inside	<div style="background-color: blue; color: white; padding: 5px; text-align: center;">NOTICE</div> <p>Material damage 24 Volt connection (230V destroys weighing cell)</p>										
	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="padding: 5px;">KAP_ZW</td><td style="padding: 5px;">3</td></tr> <tr><td style="padding: 5px;">4</td><td style="padding: 5px;"></td></tr> </table> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="padding: 5px;">AE 2</td><td style="padding: 5px;">5</td></tr> <tr><td style="padding: 5px;">6</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;">7</td><td style="padding: 5px;"></td></tr> </table> </div> <div style="margin-right: 20px;">  </div> <div>  </div> </div>		KAP_ZW	3	4		AE 2	5	6		7	
KAP_ZW	3											
4												
AE 2	5											
6												
7												
5	Establish the connection to the boiler controller. Connect the AE2 output on the boiler controller with terminal X3 (weighing cell transducer). AE2 6 = GND X3 inside AE2 5 = Input signal 0–10 Volt X3 outer <p>Note In the case of boiler controller FA, you must use the supplied plugs with installed ohm resistance.</p>											

Activation of the level detection system — Pelletronic Plus

Parameter	Display	Description
P 233	0	Activation of the level detection system 2.....Level detection system using weighing cells at the hopper.
P 133	Current weight	Displayed only, if P233 is 2. Display of the current weight in the storage room.
P 134	Low weight lim	Displayed only, if P233 is 1 or 2. The threshold value, the minimum weight for a warning message, can be varied. The warning message appears on the operating device and disappears when the filling weight is above the set minimum weight.
P 135	Weight hopper	Displayed only, if P233 is 2. Display of the current weight in the hopper.
P 137	Refill capacity	Displayed only, if P233 is 3. Set the filling capacity after refilling the storage.
P 138	Save capacity	Displayed only, if P233 is 3. Save the set filling capacity. By turning to 1 the filling capacity is added to the actual weight and P137 is reset to 0
P 235	Weight corr	Displayed only, if P233 is 2. Set the display of the current weight to 0 by putting in the negative of the current weight of the hopper shown in P 135. Therefore you have to turn the thumbweel left.

Activation of the level detection system — Pelletronic Touch



Level detection system is in the menu Pellematic.

- **Mode** Choose:
Storage Room
Level detection system using weighing cells at the hopper
- **Limit Value** is the minimum weight for a warning message. Value adjustable. The warning message appears on the operating device and disappears when the filling weight is above the set minimum weight.
- **Correction Value** Set the display of the current weight to 0 by putting in the negative of the current weight shown



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