Centrometal
HEATING TECHNIQUE

BOILER CLASS 5

WiFi READY

BioTec-L

WOOD FIRING BOILER (WOOD GASIFICATION)

Steel hot water boilers **BioTec-L** with a nominal heat output of **25** to **45 kW** are designed for wood firing. They are intended for heating from the smallest to medium-sized buildings. By the principle of wood gasification (pyrolysis), the fuel burns thoroughly. Spacious combustion chamber allows fuel firing up to 550 mm in length. The duration of one charge is at least 4 hours at rated heat output or can be for the whole day if the need for heating is reduced. The boiler has the possibility of maintaining the glow for up to 8 hours, so it is unnecessary to manually ignite the boiler within that period if you want to continue heating. The operation of the boiler is controlled by a factory-installed controller by means of boiler sensor, lambda probe, combustion chamber temperature sensor, primary and secondary air intake motors and by changing the speed of the pressure fan at the flue gas outlet from the boiler. The boiler is installed on a central heating installation indirectly via a three-way thermostatic valve or a three-way mixing valve with actuator and a buffer tank CAS. The boiler has been tested and certified according to EN 303-5 and meets class 5. It is manufactured in accordance with ISO 9001 and ISO 14001.

The factory-installed controller with a touch-sensitive color screen controls the boiler using a lambda sensor, a boiler combustion chamber temperature sensor, a boiler sensor, a motor for controlling the intake of primary and secondary air and changing the number of revolutions of the fan at the flue gas outlet from the boiler.

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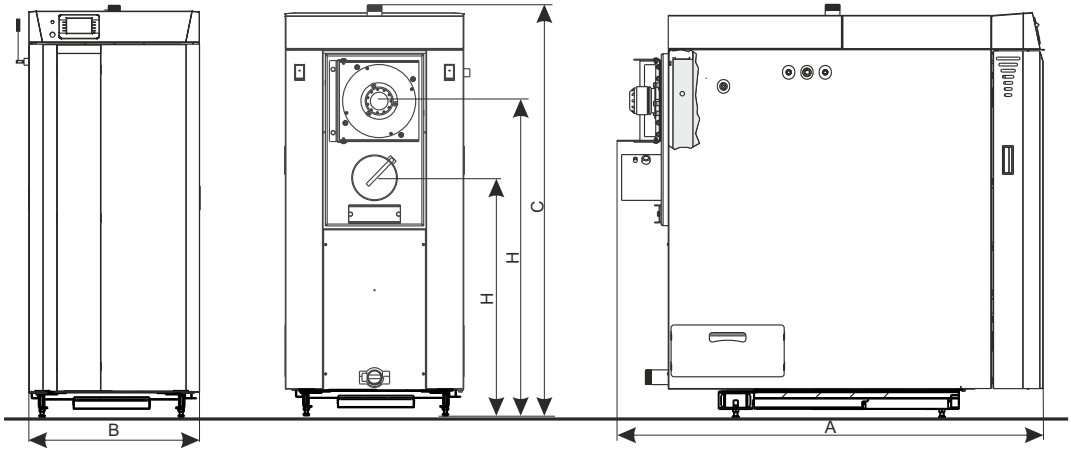
BOILER FOR ECONOMICAL AND RELIABLE HEATING

- Hot water boiler for central heating systems is engineered for wood log firing of the moisture content under 25 % (min 1 year long air dried wood).
- A modern boiler in which the fuel is thoroughly burned using the pyrolysis principle, which reduces the need for cleaning to a minimum (depending on the quality of the wood and the boiler load).
- The design and construction, including the wood gasification principle of complete burning assures high efficiency and makes the boiler extremely economical.
- Three large doors and the combustion chamber enable loading with large logs as well as very simple cleaning and maintenance.
- It is engineered for installation in open or closed central heating systems only through accumulation tanks (CAS), volume min. 40 lit./kW and a 3-way thermal valve at 60 °C.
- Additional equipment: CM WiFi-box for monitoring operation and controlling the boiler via the Internet (mobile phone, computer, laptop...), room corrector CSK-Touch, module for controlling up to max. 8 heating circuits via mixing valves according to outside or room temperature.

Boiler section

TECHNICAL CHARACTERISTICS



BioTec-L		25	34	45
Nominal heat output	(kW)	25	34	45
Chimney diameter*/ height (H)	Ø(mm)	150/1040	160/1075	180/1295
Boiler water inlet	(R)	6/4"	6/4"	6/4"
Boiler water outlet	(R)	6/4"	6/4"	6/4"
Filling / Draining	(R)	3/4"	3/4"	3/4"
Flue gas temperature	(°C)	140	140	140
Max. operating temperature	(°C)	90	90	90
Max. operating pressure	(bar)	2,5	2,5	2,5
Total boiler depth (A)	(mm)	1400	1445	1385
Total boiler height (C) + Removing the turbulator*²	(mm)	1375 + 1000	1420 + 1000	1615 + 1000
Total boiler width (B)	(mm)	590	700	700
Max. wood piece length	(mm)	450-550	450-550	450-550
Wood storage	(l)	90	144	176
Boiler water content	(l)	115	130	150
Boiler mass	(kg)	519	606	677
Energy efficiency class		A⁺	A⁺	A⁺

* - the internal diameter of the chimney is determined according to the boiler power and the height of the chimney and must almost always be larger than the diameter of the chimney.
*² possible adjustment +10/-10 mm

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