

BIOPEL 60-200 kW

Biopel Premium boilers are automatic pellet boilers for comfortable, economical and environmentally friendly heating, suitable particularly for large buildings, such as schools, hospitals, commercial building and agricultural buildings.

Two design variants are available:

- Biopel Premium 60 and Biopel Premium 80 - with a plate heat exchanger, integral automatic ash removal and pneumatic burner and heat exchanger cleaning as the standard equipment. The burner can be attached to the boiler from the right side or from the left side.
- Biopel Premium 150 and 200 - with a shell-and-tube heat exchanger, water-cooled door and pneumatic burner cleaning as the standard equipment. The burner is attached to the front of burners of this type.



SUBSIDIZED
BOILER

ECO
DESIGN

5-YEAR
WARRANTY



BIOPEL v9 Premium **60-80 kW**



BIOPEL v9 Premium **100-200 kW**

Power: 60 - 200 kW

Fuel: Wood pellets 6 - 8 mm in diameter

Economical heating:

High efficiency – up to 95.5%
Low pellet consumption

Environmentally friendly

Emission class 5 and Ecodesign - low emission

Comfortable use and maintenance

Touchscreen display
Optional control via PC
Automatic ash removal
Automatic burner and heat exchanger cleaning (only the grate can be cleaned automatically in the 150 to 200 kW versions)
Room thermoregulators for remote control

Five pumps can be connected to the system
Equithermal regulation (based on outdoor temperature)
Thermal storage tank heating control by using temperature sensors
Application for mobile phones
USB connector for software updating

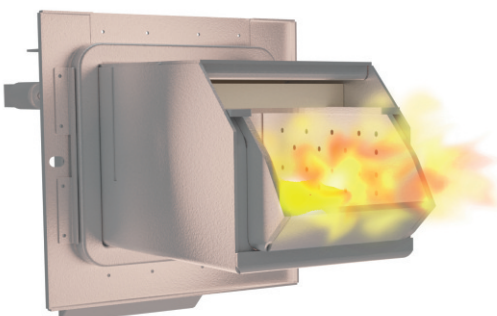
Long service life

Stainless steel burner

Reliable electronic components

Pellet storage containers

We offer a wide range of pellet storage container sizes for up to 3 tonnes of pellets
A vacuum feeder to convey the pellets automatically from the external containers to the boiler is optionally available



The burners are completely made of highly resistant refractory stainless steel, guaranteeing a long service life.

At the same time, owing to their top design, the Biopel boilers produce very low pollutant levels, lying deep below Emission class 5 and Ecodesign limits.



Minimum emissions

Emissions from BIOPEL boilers not only meet the Emission class 5 and Ecodesign emission limits: they are much lower.



Responsibility

Our staff are people with a responsible attitude to their jobs and the environment.



Innovations that spare money and time and are environmentally friendly

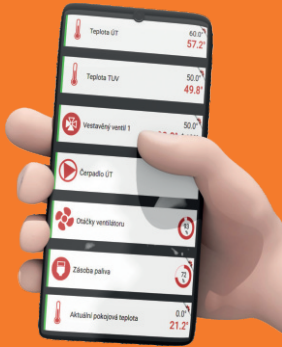
When developing new and improved products, we always have in mind your money and time we want to spare; and the environment we want to leave undisturbed.



Quality first

We build on the decades of our employees experience. We manufacture rugged boilers that will not allow coldness to fill your rooms.

BIOPEL boiler assets



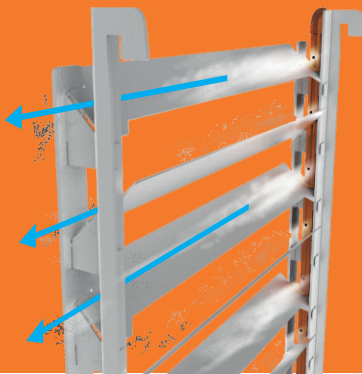
Comfortable online connection for the customers and service partners

Biopel boilers can be controlled and the heat monitored through a mobile or PC application. This application even allows the performance of the heating system to be monitored and controlled remotely by our service partner.



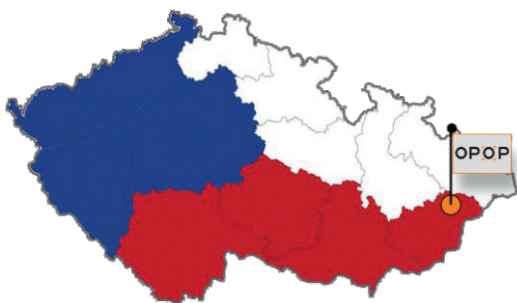
Intelligent heating control panel with a touchscreen display

A well-arranged touchscreen display with intuitive control enables the heating system to be easily operated, providing the owner with an overview of all system elements. The combination with an RT10 room thermostat raises the heating system to the highest level.



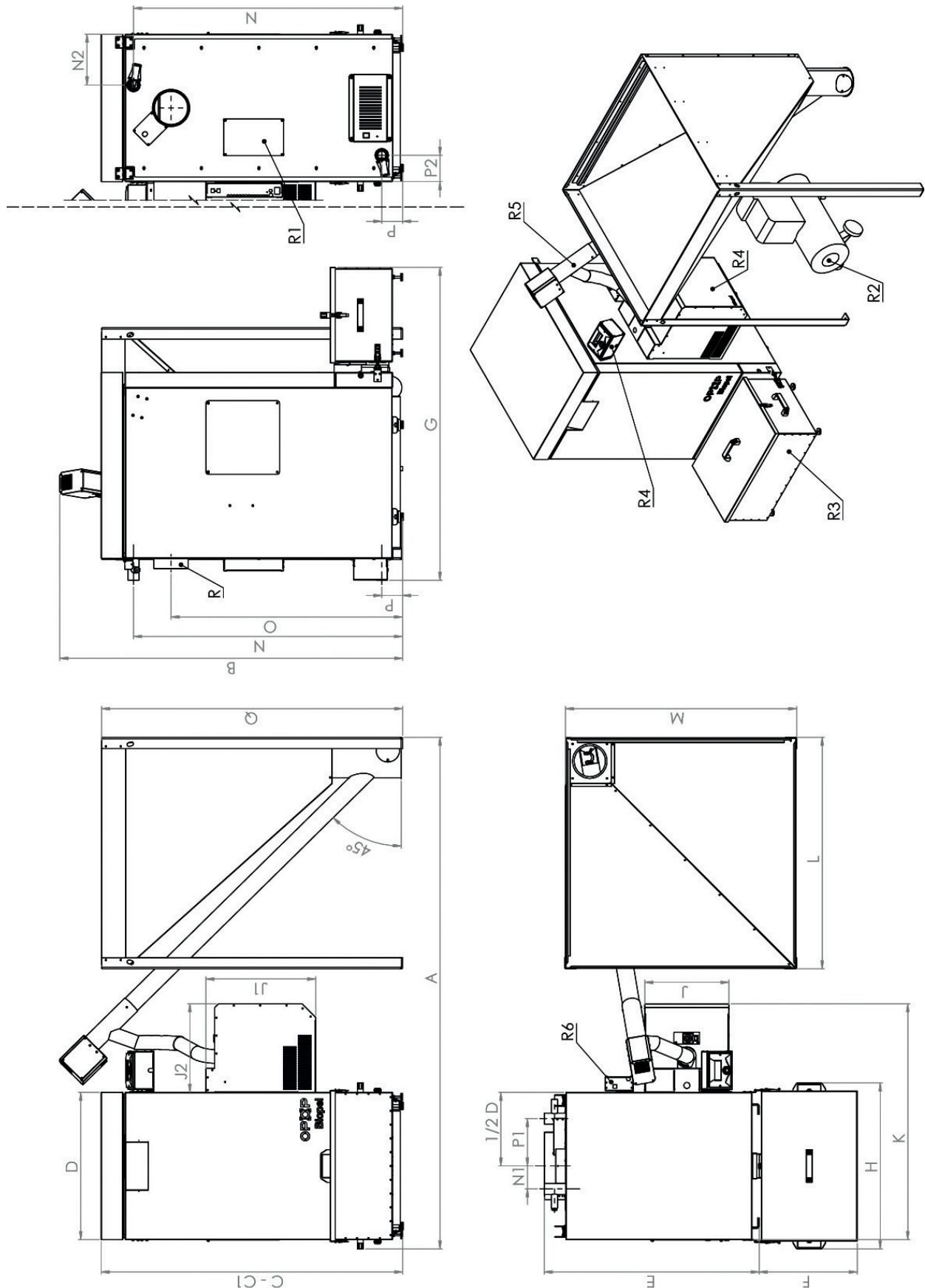
Fully automatic, with minimum maintenance

The boilers are fully automatic, with unattended control of all of the heating system elements. What's more, the BIOPEL boilers up to 80 kW are equipped with an automatic heat exchanger/burner cleaning system, thereby reducing requirements for maintenance to a minimum. So, you only must periodically stoke pellets and occasionally remove the ash, which is dry and the removal of which takes minimal time.



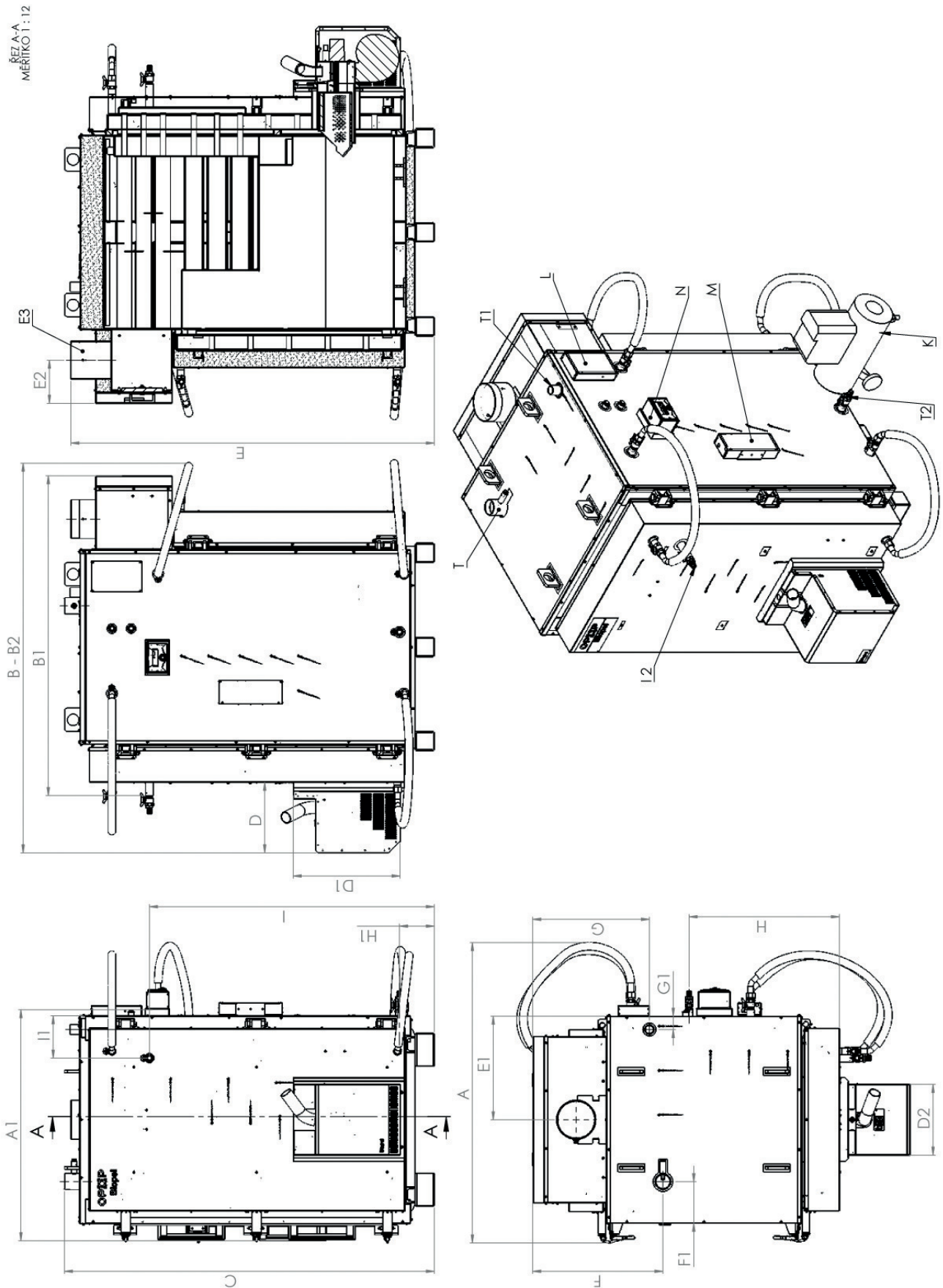
Made in Czech Republic

We have been a foremost Czech boiler manufacturer since 1959. We manufacture boilers that can heat your homes for decades. They generate heat reliably, are comfortable and spare your time.



Technical parameters		BIOPEL 60	BIOPEL 80
Nominal thermal power	[kW]	60	80
Observed nominal power	[kW]	63,5	84,4
Observed minimum power	[kW]	15,5	19,96
Efficiency	[%]	90,6	90,1
Boiler class according to EN 303-5:2013		5 / ecodesign	
Prescribed fuel		Wood pellets 6-8mm	
Fuel consumption (observed nominal power)	[kg/hr]	15,1	20,1
Fuel consumption (observed min. power)	[kg/hr]	3,9	5,2
Maximum heating water operating temperature	[°C]	85	85
Minimum heating water temperature	[°C]	70	70
Minimum return water temperature	[°C]	65	65
Flue gas temperature	[°C]	117,8	131,9
Minimum flue gas temperature	[°C]	60	60
Required chimney draft	[Pa]	10 - 15	10 - 15
Maximum operating water pressure	[Bar]	2	2
Minimum operating water pressure	[Bar]	1,5	1,5
Maximum testing water pressure	[Bar]	4	4
Supply voltage	[V/Hz]	230/50 Hz	230/50 Hz
Operating/maximum electrical input power	[W]	90/393	188/488
Boiler weight without water	[kg]	385	480
Boiler weight with water	[kg]	480	610
Water volume of the boiler	[l]	95	130
Sound level	[dB]	51,5 - 67	51,5-67
Combustion product mass flow rate (nominal power)	[g/s]	43,1	12,3
Combustion product mass flow rate (minimum power)	[g/s]	46,5	15,7
Enclosure		IP20	IP20
Boiler body wall thickness (water/flame)	[mm]	6	6
Boiler body wall thickness (water)	[mm]	3	3
Energy efficiency class		A+	A+

Size	BIOPEL 60	BIOPEL 80
Coupling sleeve type: output/input (female)	Js	G1 1/4"
Draining/filling connection (inner thread)	Js	G1 1/2"
C - Boiler height	[mm]	1312
C1 - Boiler height with the lid open	[mm]	2027
D - Boiler width	[mm]	641
E - Boiler depth	[mm]	936
F - Depth of the ash pan autom. ash removal	[mm]	427
G - Total depth, ash pan included	[mm]	1362
H - Ash pan width autom. ash removal.	[mm]	723
J - Burner cover width	[mm]	366
J1 - Burner cover height	[mm]	479
J2 - Burner cover depth	[mm]	385
K - Total boiler width	[mm]	1026
N - Output water coupling sleeve height from the ground	[mm]	1171
N1 - Output water coupling sleeve distance from the boiler centre	[mm]	100
N2 - Output water coupling sleeve distance from the boiler side	[mm]	221
E - Flue height from the ground	[mm]	1007
N - Input water coupling sleeve height from the ground	[mm]	90
P1 - Input water coupling sleeve distance from the boiler centre	[mm]	206
P2 - Input water coupling sleeve distance from the boiler side	[mm]	115
R - Flue diameter	[mm]	150
R1 - Lambda probe	R2 - Compressor	
R3 - Ash pan of the ash removal system	R4 - Control unit	
R5 - Pellet feeder	R6 - Burner socket	
Dimensions with the external pellet container		
A - total max. boiler width, pellet container included	[mm]	2228
B - total boiler height, feeder included	[mm]	1492
Container 60x60 (L - width/ M - depth)	[mm]	600 / 600
Container 80x80 (L - width/ M - depth)	[mm]	815 / 815
Container 100x100 (L - width/ M - depth)	[mm]	1000 / 1000
Expanded container (L - width/ M - depth)	[mm]	815 / 1420
Q - Hopper height	[mm]	1300
Container 60x60 volume (pellets 6mm) / weight	[kg]	110 / 25
Container 80x80 volume (pellets 6mm) / weight	[kg]	220 / 29
Container 100x100 volume (pellets 6mm) / weight	[kg]	300 / 35
Container 80x142 volume (pellets 6mm) / weight	[kg]	350 / 38



Technical parameters		BIOPEL 150	BIOPEL 200
Nominal thermal power	[kW]	150	200
Observed nominal power	[kW]	154,5	201,4
Observed minimum power	[kW]	44,5	59,9
Efficiency	[%]	91,8	95,5
Boiler class according to EN 303-5:2013		5 / ecodesign	
Prescribed fuel		Wood pellets 6-8mm	
Fuel consumption (observed nominal power)	[kg/hr]	35,2	45
Fuel consumption (observed min. power)	[kg/hr]	10,3	13,9
Maximum heating water operating temperature	[°C]	85	85
Minimum heating water temperature	[°C]	70	70
Minimum return water temperature	[°C]	65	65
Flue gas temperature	[°C]	92,6	93,5
Minimum flue gas temperature	[°C]	70	70
Required chimney draft	[Pa]	10 - 15	10 - 15
Maximum operating water pressure	[Bar]	2	2
Minimum operating water pressure	[Bar]	1,5	1,5
Maximum testing water pressure	[Bar]	4	4
Supply voltage	[V/Hz]	230/50 Hz	230/50 Hz
Operating/maximum electrical input power	[W]	243-543	243-543
Boiler weight without water	[kg]	1740	2133
Boiler weight with water	[kg]	2690	3323
Water volume of the boiler	[l]	950	1190
Sound level	[dB]	59 - 76	59 - 76
Combustion product mass flow rate (nominal power)	[g/s]	68,1	84,76
Combustion product mass flow rate (minimum power)	[g/s]	32,3	44,3
Enclosure		IP20	
Boiler body wall thickness (water/flame)	[mm]	6	
Boiler body wall thickness (water)	[mm]	5	
Energy efficiency class		A+	

Size	BIOPEL 150	BIOPEL 200
T - Connecting sleeve type: output (inner thread)	Js	G 2 1/2"
T1 - Coupling sleeve type: input (inner thread)	Js	G 1 1/2"
T2 - Connection for water supply (l)	Js	G 1"
A - Total max. boiler width, hoses included	[mm]	1560
A1 - Total max. width (boiler only)	[mm]	1198
B - Total max. boiler depth, hoses and burner included	[mm]	2422
B1 - Total max. boiler depth (boiler only)	[mm]	2060
B2 - Total max. boiler depth with door open	[mm]	3700
C - Total max. boiler height	[mm]	1919
D - Burner cover depth	[mm]	376
D1 - Burner cover height	[mm]	579
D2 - Burner cover width	[mm]	522
E - Flue height from the floor	[mm]	1886
E1 - flue distance from the side cover	[mm]	538
E2 - flue distance from the rear cover	[mm]	224
E3 - Flue diameter	[mm]	199
F - Output water coupling sleeve distance from the rear cover	[mm]	676
F1 - Output water coupling sleeve distance from the side cover	[mm]	217
G - Input water coupling sleeve distance from the rear cover	[mm]	606
G1 - Input water coupling sleeve distance from the side cover	[mm]	70
H - feedwater coupling sleeve distance from the front cover	[mm]	1211
H1 - feedwater coupling sleeve height from the ground	[mm]	181
I - pneumatic cleaning coupling sleeve height from the ground	[mm]	1478
I1 - pneumatic cleaning coupling sleeve distance from the cover	[mm]	220
I2 - pneumatic cleaning coupling sleeve		
K - Compressor		
L - Lambda probe		
M - burner socket		
N - control unit		