

## Technical Data

### Technical Data

		Standard heating boiler	
Boiler Model	Model No.	WB1B 26	WB1B 35
<b>Natural gas and LPG</b>			
CSA input	MBH	37-91	37-118
	kW	10.8-26.7	10.8-34.6
CSA output/DOE* <sup>1</sup>	MBH	34-83	34-108
heating capacity	kW	9.9-24.3	9.9-31.6
Net I = B = R rating* <sup>2</sup>	MBH	72	94
Heat exchanger surface area	ft. <sup>2</sup>	10.23	10.23
	m <sup>2</sup>	0.86	0.86
<b>Min. gas supply pressure</b>			
Natural gas	"w.c.	4	4
LPG	"w.c.	10	10
<b>Max. gas supply pressure*<sup>3</sup></b>			
Natural gas and LPG	"w.c.	14	14
A.F.U.E.	%	95.2	95.2
Weight	lbs	78	78
	kg	34.1	34.1
Shipping weight	lbs	95	95
	kg	43	43
Boiler water content	USG	0.87	0.87
	ltr	3.3	3.3
Boiler max. flow rate* <sup>4</sup>	GPM	6.2	6.2
	ltr/h	1400	1400
Max. operating pressure at 210°F / 99°C	psig	45	45
	bar	3	3
<b>Boiler water temperature</b>			
- Adjustable high limit (AHL) range			
- space heating (steady state)		°F / °C 86 to 176 / 30 to 80	
- DHW production (set-point)		°F / °C 172 / 78	
- Fixed high limit (FHL)		°F / °C 210 / 99	
<b>Boiler connections</b>			
Boiler heating supply and return	NPTM (male) "	¾	¾
Pressure relief valve	NPTF (female) "	¾	¾
Drain valve	(male thread)	¾	¾
<b>Dimensions</b>			
Overall depth	inches	14 <sup>1</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>8</sub>
	mm	360	360
Overall width	inches	15 <sup>3</sup> / <sub>4</sub>	15 <sup>3</sup> / <sub>4</sub>
	mm	400	400
Overall height	inches	28 <sup>1</sup> / <sub>2</sub>	28 <sup>1</sup> / <sub>2</sub>
	mm	725	725

\*<sup>1</sup> Output based on 140°F / 60°C, 120 °F / 49°C system supply/return temperature.

\*<sup>2</sup> Net I = B = R rating based on piping and pick-up allowance of 1.15.

\*<sup>3</sup> If the gas supply pressure exceeds the maximum gas supply pressure value, a separate gas pressure regulator must be installed upstream of the heating system.

\*<sup>4</sup> See "Maximum Flow Rates" on pages 15 to 17 in this manual.

# Vitodens 100-W

		Standard heating boiler	
Boiler Model	Model No.	WB1B 10-26	WB1B 10-35
Gas supply connection	NPTF "	3/4	3/4
<b>Flue gas *5</b>			
Temperature (at boiler return temperature of 86°F / 30°C)			
- at rated full load	°F / °C	127 / 53	131 / 55
- at rated partial load	°F / °C	90 / 32	90 / 32
Temperature (at boiler return temperature of 140°F / 60°C)		167 / 75	172 / 78
<b>Flue gas value</b>			
Mass flow rate (of flue gas)			
- at rated full load	lbs/h	79.2	100.1
	kg/h	36.0	45.5
- at rated partial load	lbs/h	33.0	33.0
	kg/h	15.0	15.0
Available draught	Pa	100	100
	mbar	1.0	1.0
Flue gas temperature sensor limit	°F / °C	230 / 110	230 / 110
<b>Average condensate flow rate *6</b>			
with natural gas			
- T <sub>S</sub> /T <sub>R</sub> = 122/86°F / 50/30 °C	USG/day	1.95-2.3	2.5-2.8
	ltr/day	8-9	9.4-10.5
Condensate connection *7	hose nozzle Ø in	1	1
Boiler flue gas connection *8	Ø in/mm	2 <sup>3</sup> / <sub>8</sub> /60	2 <sup>3</sup> / <sub>8</sub> /60
Combustion air supply connection *8	outer Ø in/mm	4/100	4/100
<b>Noise level (at 1 meter)</b>			
- at full load	(dB)	47	49
- at partial load	(dB)	40	42
High altitude (factory set) *9	ft. / m	0-5,000 / 0-1,500	0-5,000 / 0-1,500

\*5 Measured flue gas temperature with a combustion air temperature of 68°F / 20°C.

\*6 Based on typical boiler cycles, including partial load conditions.

\*7 Requires 1" / 25 mm tubing. See Vitodens 100-W Installation Instructions for details.

\*8 For an overview of venting options refer to the appendix starting on page 19. For detailed information refer to the Vitodens Venting System Installation Instructions.

\*9 For 5,000 to 10,000 ft / 1,500 to 3,048 m operation, a coding address change is required. Refer to the Installation and Service Instructions for details.

► For information regarding other Viessmann System Technology componentry, please reference documentation of respective product.

# Vitodens 100-W/Technical Data

## Recommended Minimum Service Clearances

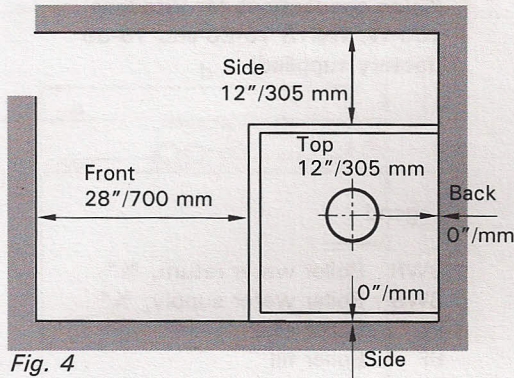


Fig. 4

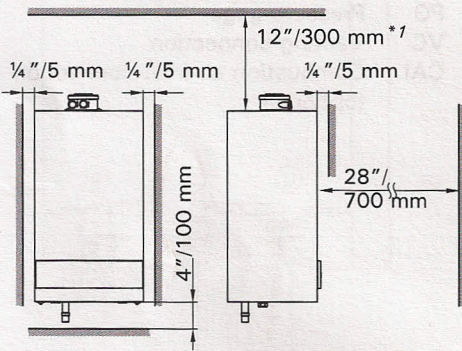


Fig. 5

## Minimum Clearances to Combustibles

Top	Front	Rear	Left	Right	Vent pipe*1
0	0 AL, CL	0	0	0	0

AL = Alcove

CL = Closet

\*1 Refer to the Installation Instructions of the Vitodens Venting System for details.

### Note:

The Vitodens 100-W boiler has passed the zero inches vent clearance to combustibles testing requirements provided by the boiler Harmonized Standard ANSI Z21.13. CSA 4.9.2005 and therefore is listed for zero clearance to combustibles when vented with a single wall special venting system (AL-29-4C material) or UL/ULC-listed CPVC gas vent material. The zero inches vent clearance to combustibles for the Vitodens 100-W boiler supercedes the clearance to combustibles listing that appears on the special venting system label.

Boiler model WB1B-26  
SN 8066.71234980XTN