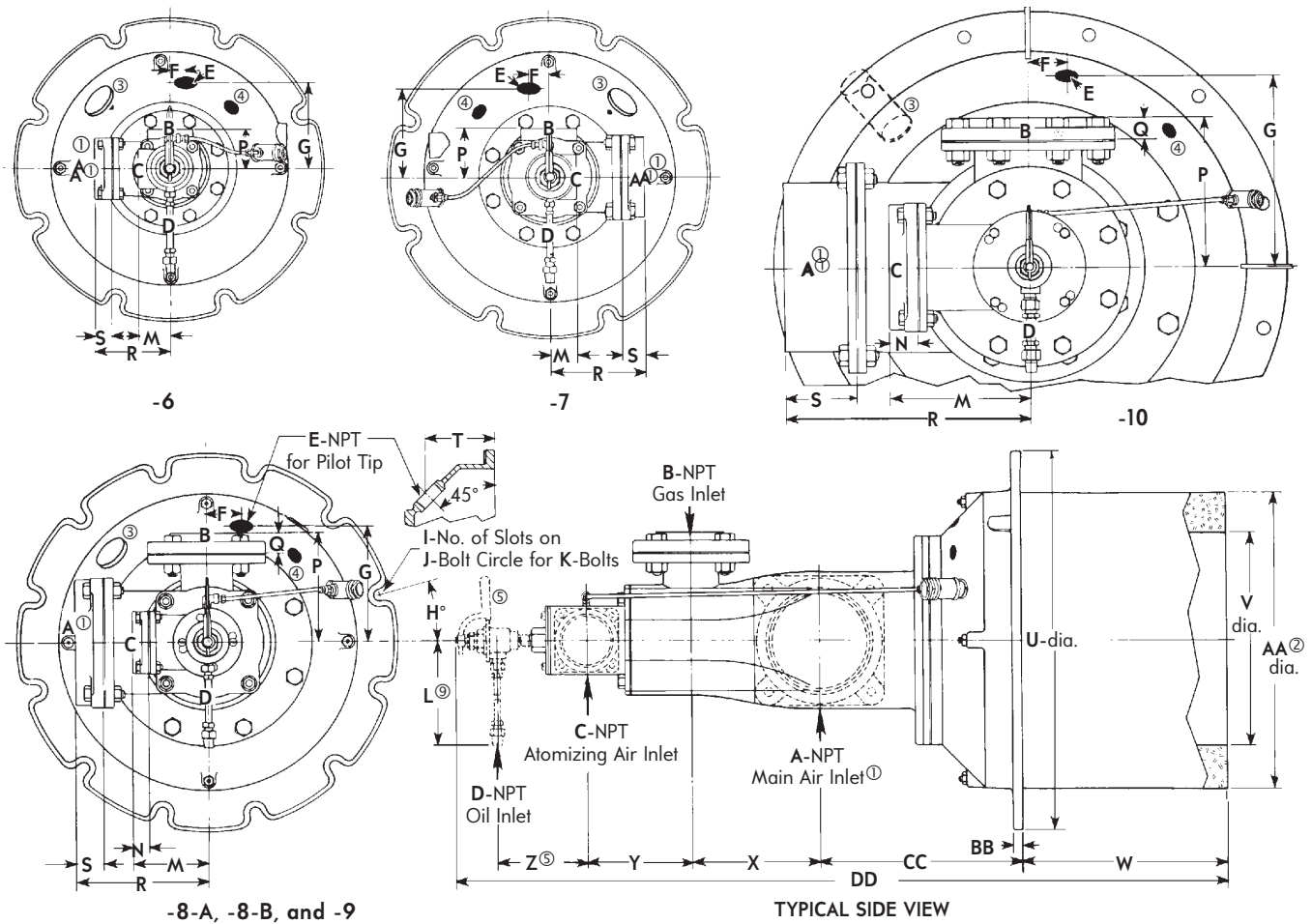


## North American Fire•All™ Dual-Fuel™ Burners

Dimensions 6514

**DIMENSIONS** – Main air, gas, atomizing air, and oil connections can be rotated relative to one another and to the mounting plate. Drawings show connections as assembled at the factory. These arrangements reduce maintenance by preventing oil dripping into air or gas manifolds (which should be above burners) and by minimizing dirt accumulation in pilots and flame supervisory devices. Pilot and main air connections cannot be aligned in the same direction.



DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC. IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

Burner designation	Dimensions in inches and degrees														
	A <sup>1</sup>	B	C	D	E	F	G	H°	I	J	K	L <sup>2</sup>	M	N	P
6514-6	3	2	1½	¾	¾	1	5 <sup>17</sup> / <sub>32</sub>	22½	8	18	¾	19¾	2	—	2½
6514-7	4	2½	2	¾	1¼	1¼	5¾	22½	8	19	¾	19¾	1¾	—	3¼
6514-8-A	6	2½	2½	¾	1¼	1½	6 <sup>7</sup> / <sub>8</sub>	15	12	21¼	¾	19¾	2¾	—	3 <sup>7</sup> / <sub>8</sub>
6514-8-B	6	3 <sup>8</sup>	3 <sup>7</sup>	¾	1¼	2¼	7 <sup>3</sup> / <sub>8</sub>	15	12	22½	¾	19¾	5 <sup>3</sup> / <sub>16</sub> <sup>1</sup>	1 <sup>1</sup> / <sub>16</sub>	6 <sup>13</sup> / <sub>16</sub>
6514-9	8	4 <sup>8</sup>	4 <sup>7</sup>	½	1½	2¼	9 <sup>7</sup> / <sub>8</sub>	15	12	26½	¾	20¾	7 <sup>7</sup> / <sub>8</sub> <sup>1</sup>	1 <sup>1</sup> / <sub>16</sub>	8 <sup>13</sup> / <sub>16</sub>
6514-10	10	6 <sup>8</sup>	6 <sup>7</sup>	½	1½	2½	12 <sup>3</sup> / <sub>16</sub>	15	12	30½	¾	20¾	8 <sup>7</sup> / <sub>8</sub> <sup>1</sup>	1 <sup>1</sup> / <sub>16</sub>	9 <sup>11</sup> / <sub>16</sub>

See page 2 for chart, notes and additional information.

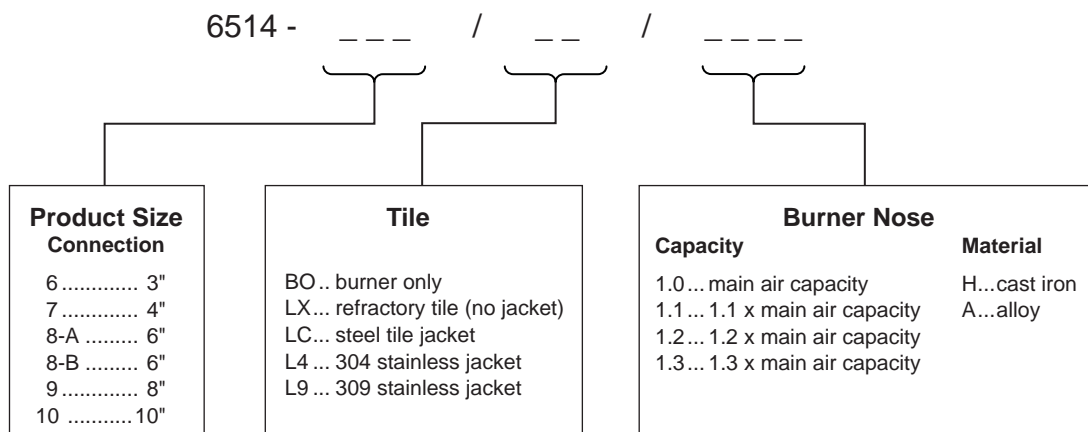
Burner designation	Dimensions in inches											6514- /LX (refractory tile)				wt lb
	Q	R	R <sub>1</sub> <sup>⑥</sup>	S	T	U	V	W	X	Y	Z <sup>⑤</sup>	AA <sup>②</sup>	BB	CC	DD <sup>⑤</sup>	
<b>6514-6</b>	—	5 <sup>3</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3 <sup>7</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>2</sub>	10 <sup>3</sup> / <sub>8</sub>	9	4	4	4 <sup>1</sup> / <sub>16</sub>	15	5 <sup>5</sup> / <sub>8</sub>	8 <sup>1</sup> / <sub>4</sub>	32 <sup>3</sup> / <sub>16</sub>	195
<b>6514-7</b>	—	6 <sup>1</sup> / <sub>8</sub>	10 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	20 <sup>1</sup> / <sub>2</sub>	11 <sup>3</sup> / <sub>8</sub>	8 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	16	5 <sup>5</sup> / <sub>8</sub>	9 <sup>1</sup> / <sub>4</sub>	34 <sup>3</sup> / <sub>8</sub>	225
<b>6514-8-A</b>	—	7 <sup>3</sup> / <sub>8</sub>	11 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	4 <sup>5</sup> / <sub>16</sub>	22 <sup>3</sup> / <sub>4</sub>	12 <sup>3</sup> / <sub>8</sub>	10	6 <sup>5</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>8</sub>	4 <sup>15</sup> / <sub>16</sub>	17 <sup>3</sup> / <sub>4</sub>	5 <sup>5</sup> / <sub>8</sub>	12 <sup>13</sup> / <sub>16</sub>	41 <sup>15</sup> / <sub>16</sub>	335
<b>6514-8-B</b>	1 <sup>3</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>2</sub>	12 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	4 <sup>5</sup> / <sub>16</sub>	24	13 <sup>1</sup> / <sub>2</sub>	12 <sup>7</sup> / <sub>8</sub>	8 <sup>3</sup> / <sub>16</sub>	6 <sup>11</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>16</sub>	19	5 <sup>5</sup> / <sub>8</sub>	12 <sup>13</sup> / <sub>16</sub>	48 <sup>13</sup> / <sub>16</sub>	450
<b>6514-9</b>	1 <sup>5</sup> / <sub>16</sub>	13 <sup>3</sup> / <sub>8</sub>	—	3 <sup>13</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>16</sub>	28	16	13 <sup>7</sup> / <sub>16</sub>	11 <sup>5</sup> / <sub>16</sub>	8 <sup>7</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>16</sub>	23	5 <sup>5</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>16</sub>	57 <sup>1</sup> / <sub>2</sub>	795
<b>6514-10</b>	1 <sup>1</sup> / <sub>16</sub>	15 <sup>7</sup> / <sub>16</sub>	—	4 <sup>3</sup> / <sub>8</sub>	5 <sup>15</sup> / <sub>16</sub>	32 <sup>1</sup> / <sub>2</sub>	20 <sup>1</sup> / <sub>2</sub>	13 <sup>3</sup> / <sub>8</sub>	13 <sup>1</sup> / <sub>16</sub>	11 <sup>3</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	27 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	16 <sup>3</sup> / <sub>8</sub>	63 <sup>13</sup> / <sub>16</sub>	1035

Burner designation	6514- /LC,L4,L9 (jacketed tile)					All 6514	
	Dimensions in inches				wt lb	Recommended Sensitrol™ oil valve	Recommended pilot tip
AA <sup>②</sup>	BB	CC	DD <sup>⑤</sup>				
<b>6514-6</b>	16	3 <sup>4</sup> / <sub>4</sub>	8 <sup>3</sup> / <sub>8</sub>	32 <sup>5</sup> / <sub>16</sub>	215	1813-02-C	4021-12
<b>6514-7</b>	17	3 <sup>4</sup> / <sub>4</sub>	9 <sup>3</sup> / <sub>8</sub>	34 <sup>1</sup> / <sub>2</sub>	250	1813-02-D	4025-0-T
<b>6514-8-A</b>	18 <sup>3</sup> / <sub>4</sub>	3 <sup>4</sup> / <sub>4</sub>	12 <sup>15</sup> / <sub>16</sub>	42 <sup>1</sup> / <sub>16</sub>	370	1813-02-D	4025-0-T
<b>6514-8-B</b>	20	3 <sup>4</sup> / <sub>4</sub>	12 <sup>15</sup> / <sub>16</sub>	48 <sup>15</sup> / <sub>16</sub>	495	1813-02-D	4025-0-T
<b>6514-9</b>	24 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>16</sub>	14 <sup>7</sup> / <sub>8</sub>	57 <sup>11</sup> / <sub>16</sub>	860	1813-01	4025-2-T
<b>6514-10</b>	27 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>16</sub>	16 <sup>5</sup> / <sub>16</sub>	63 <sup>13</sup> / <sub>16</sub>	1085	1813-01	4025-2-T

- ① A square threaded flange is used for sizes -6, -7, -8. SW style (suitable for slip-on or welded connection) inlet may be ordered as a special option. An SW inlet is standard for -9 and -10 burners.
- ② Opening in furnace shell or outer wall must be 1/2" larger than dimension "AA" to allow for mounting plate fillet and draft.
- ③ Blank boss--This may be ordered as a special option with a 1 1/2" tap suitable for 5025-3-1T Oil Pilot, in which case North American will drill out 1/2" web of refractory left in tile before shipment, and the burner nose will be positioned so none of its holes are in front of that opening. For -10 size, an appropriate 1 1/2" npt half-coupling will be added as a special option.
- ④ 1" fpt for electrode or UV flame detector.
- ⑤ Pipe nipple and optional (recommended) Sensitrol Oil Valve are not included as part of the burner assembly, and must be ordered separately. Dimensions Z and DD assume a 3/8" close nipple between burner and Sensitrol Oil Valve (6514-6 through -8-B) and a 1/2" close nipple between burner and Sensitrol Valve (6514-9 and -10).
- ⑥ Applies when optional SW inlet is specified.
- ⑦ Flanged connection--a standard Fives square threaded flange is used.
- ⑧ Flanged connection--a standard ANSI 125 psi threaded flange is used.
- ⑨ Optional 8773 flex tubing purchased separately from North American.

ANSI or SW flanges: Flat face companion flanges and full face gaskets are supplied with this equipment. Do not use raised face flanges that may damage mating flange.

## ORDERING INFORMATION



Example 1 6514-8-A/LC/1.2A Fireall dual fuel burner complete with carbon steel jacketed tile and 1.2 capacity alloy nose

Example 2 6514-6/BO/1.0H Fireall dual fuel burner only with standard capacity iron nose

Example 3 6514-9/LX/1.2H Fireall dual fuel burner complete with refractory tile and 1.2 capacity iron nose

*Note: See Supplement 6514-6 for cross referencing old products numbers*

**WARNING:** Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., is inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and Insurance Underwriters' recommendations, and care in operation.



**CONTACT US:**  
**Fives North American Combustion, Inc.**  
 4455 East 71st Street - Cleveland, OH 44105 - USA  
 Tel: +1 216 271 6000 - Fax: +1 216 373 4237  
 Email: [fna.sales@fivesgroup.com](mailto:fna.sales@fivesgroup.com)

[www.fivesgroup.com](http://www.fivesgroup.com)