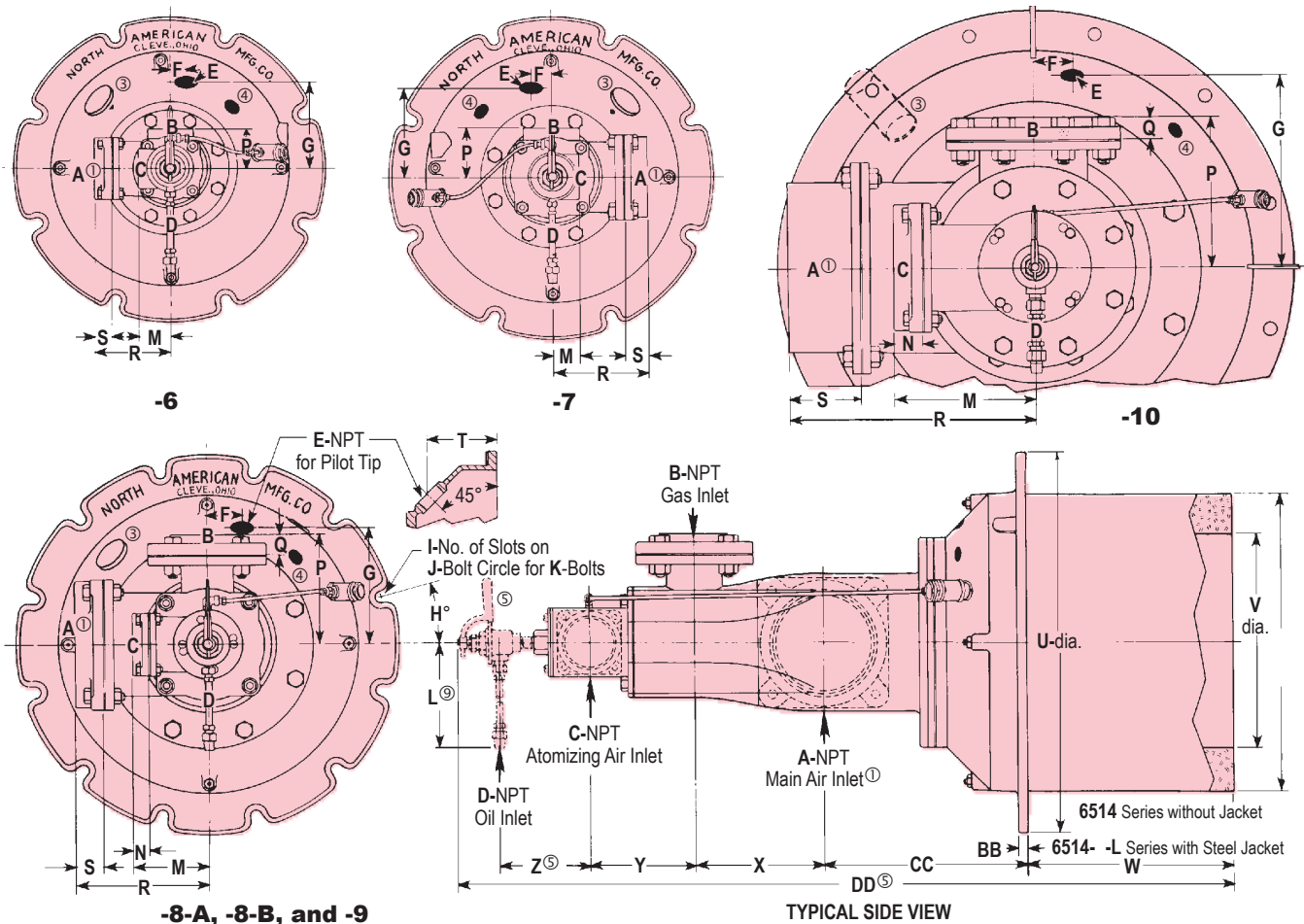




DIMENSIONS – Main air, gas, atomizing air, and oil connections can be rotated relative to one another and to the mounting plate. Drawings show connections as assembled at the factory. These arrangements reduce maintenance by preventing oil dripping into air or gas manifolds (which should be above burners) 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	Common dimensions in inches and degrees for 6514 and 6514- L														
	A ^①	B	C	D	E	F	G	H°	I	J	K	L ^②	M	N	P
6514-6	3	2	1 1/2	3/8	3/4	1	5 17/32	22 1/2	8	18	5/8	19 3/4	2	—	2 1/2
6514-7	4	2 1/2	2	3/8	1 1/4	1 1/4	5 3/4	22 1/2	8	19	5/8	19 3/4	1 3/4	—	3 1/4
6514-8-A	6	2 1/2	2 1/2	3/8	1 1/4	1 1/2	6 7/8	15	12	21 1/4	5/8	19 3/4	2 3/8	—	3 7/8
6514-8-B	6	3 ^⑧	3 ^⑦	3/8	1 1/4	2 1/4	7 3/8	15	12	22 1/2	5/8	19 3/4	5 3/16 ^①	1 1/2	6 13/16
6514-9	8	4 ^⑧	4 ^⑦	1/2	1 1/2	2 1/4	9 7/8	15	12	26 1/2	5/8	20 3/4	7 13/16 ^①	1 1/2	8 3/4
6514-10	10	6 ^⑧	6 ^⑦	1/2	1 1/2	2 1/2	12 3/16	15	12	30 1/2	3/4	20 3/4	8 13/16 ^①	1 3/4	9 5/8

Burner designation	Common dimensions in inches for 6514 and 6514- L											for 6514 only				wt lb
	Q	R	R ₁ ^⑥	S	T	U	V	W	X	Y	Z ^⑤	AA ^②	BB	CC	DD ^⑤	
6514-6	—	5 3/16	10 3/8	1 1/2	3 7/16	19 1/2	10 3/8	9	3 7/8	4	4 1/16	15	5/8	8 7/16	31 11/16	165
6514-7	—	6 1/16	10 1/8	1 1/2	3 15/16	20 1/2	11 3/8	9	4 1/16	4 1/16	4 7/16	16	5/8	9 1/4	34	215
6514-8-A	—	7 7/16	11 1/4	1 3/4	4 5/16	22 3/4	12 3/8	10	6 1/4	4 15/16	4 15/16	17 3/4	5/8	12 7/8	41 9/16	300
6514-8-B	1 3/16	8 7/16	12 3/8	1 3/4	4 5/16	24	13 1/2	13	8 7/8	6 11/16	5 3/16	19	5/8	12 7/8	48 7/16	410
6514-9	1 5/16	13 3/8	—	3 13/16	6 3/16	28	16	13 1/2	11 5/16	8 7/16	6 3/16	23	5/8	14 11/16	57 3/16	705
6514-10	1 9/16	15 7/16	—	4 3/8	5 15/16	32 1/2	20 1/2	13 7/16†	13 1/16	11 3/16	6 11/16	27 1/2	1/2	16 1/8	63 5/8	990

See back for notes and additional information, including 6514- L dimensions and weights.
† 6514-10 only is offered with a short (2") tile designated 6514-10-S.

Burner designation	for 6514- -L only				wt lb	for 6514 and 6514- -L only	
	AA	BB	CC	DD		Recommended Sensitrol™ oil valve	Recommended pilot tip
6514-6	16	$\frac{3}{4}$	$\frac{87}{16}$	$\frac{325}{16}$	190	1813-02-C	4021-12
6514-7	17	$\frac{3}{4}$	$\frac{93}{8}$	$\frac{341}{2}$	245	1813-02-D	4025-0-T
6514-8-A	$\frac{183}{4}$	$\frac{3}{4}$	13	$\frac{421}{16}$	335	1813-02-D	4025-0-T
6514-8-B	20	$\frac{3}{4}$	13	$\frac{4815}{16}$	455	1813-02-D	4025-0-T
6514-9	$\frac{241}{4}$	$\frac{13}{16}$	$\frac{147}{8}$	$\frac{5711}{16}$	755	1813-01	4025-2-T
6514-10	$\frac{271}{2}$	$\frac{11}{16}$	$\frac{165}{16}$	64	1020	1813-01	4025-2-T

- ① Flanged connection--a standard North American square threaded flange is used for sizes -6, -7, -8 main air connections, but SW style inlet may be specified with no change in price. An SW inlet (suitable for slip-on or welded connection) is standard for -9 and -10 burners.
- ② Opening in furnace shell or outer wall must be $\frac{1}{2}$ " larger than dimension "AA" to allow for mounting plate fillet and draft.
- ③ Blank boss--as a no cost special may be specified with a 2" pipe tap for photocell, or a $\frac{1}{2}$ " tap suitable for 5025-3-1T Oil Pilot, in which case North American will drill out $\frac{1}{2}$ " 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. Available upon request. For -10 size, which has no boss, one half of an appropriately sized coupling is added when specified.
- 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 $\frac{3}{8}$ " close nipple between burner and Sensitrol Oil Valve (6514-6 through -8-B) and a $\frac{1}{2}$ " close nipple between burner and Sensitrol Valve (6514-9 and -10).
- ⑥ Applies when optional SW inlet is specified.
- ⑦ Flanged connection--a standard North American square threaded flange is used.
- ⑧ Flanged connection--a standard ANSI 125 psi threaded flange is used.
- ⑨ If Optional tubing purchased 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

To order, specify: 6514-(code)-(A or B if applicable) Burner complete and list 1813 Sensitrol Oil Valve separately.

Example: 6514-8-B Burner complete
1813-02-D Sensitrol Oil Valve

Options:

Add modifier to third term:

- BO = Burner only (less mounting and tile)
- LC = carbon steel tile jacket
- L4 = 304 SST tile jacket
- L9 = 309 SST tile jacket

6514-8-AL4 Burner complete (with 304 SST tile jacket)
1813-02-D Sensitrol Oil Valve

6514-8-BBO Burner only

Optional short tile for 6514-10

Example: 6514-10-S Burner complete with short tile

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., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American urges compliance with National Safety Standards and insurance Underwriters recommendations, and care in operation.

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