

AB-3PFB5 SERIES

THREE PASS FIREBOX
PACKAGED BOILERS

**ALLIED
BOILER**
& SUPPLY INC.

■ ALLIED WORK FORCE BOILERS ■

Capacities From
7.4 to 650 HP
248 to 21759
MBTU/HR.

Available in LOW NOx

15 PSI Steam
30 PSI Water
(60 PSI Water Optional)

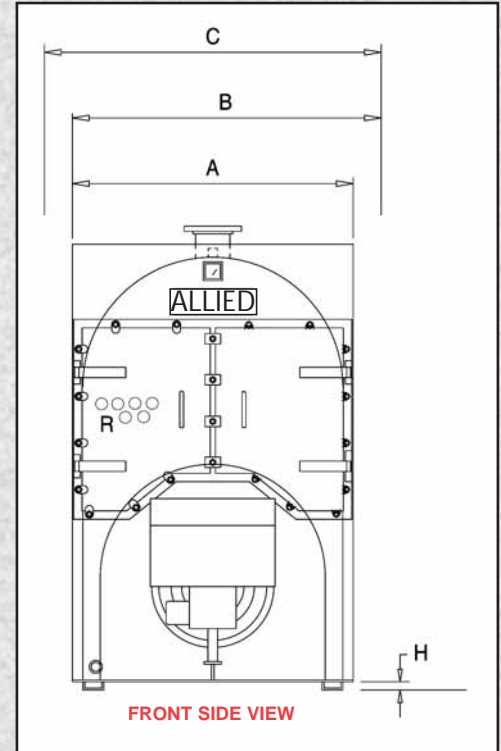
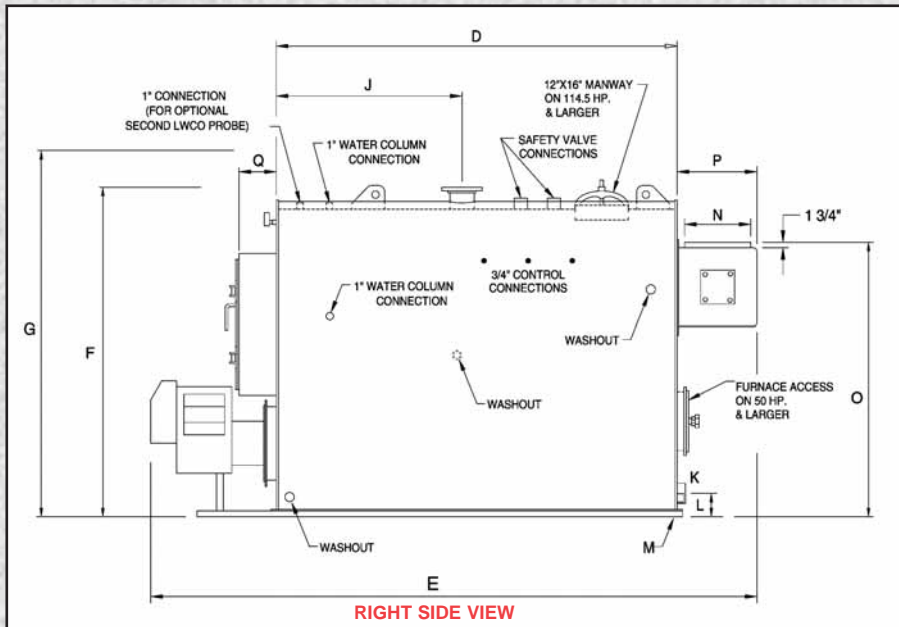
UL Approved
Forced Draft Burners



Inspected and registered
with the National Board of
Boiler & Pressure Vessel Inspectors.



Designed, constructed
and stamped in accordance with
the requirements of the ASME Boiler Codes.



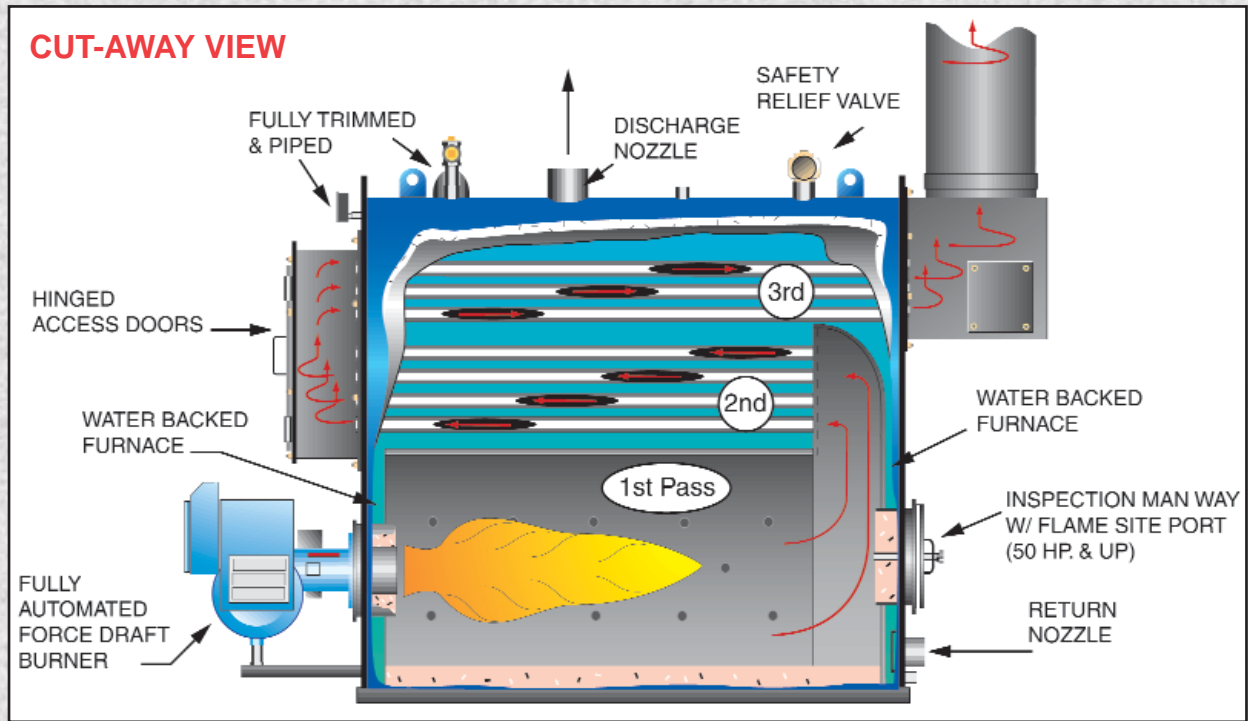
BOILER SPECIFICATIONS

(ALL DIMENSIONS ARE IN INCHES)

BOILER HORSEPOWER / MODEL NO.			7.4	11	13.4	17.2	21	25	30	40	45	50
GROSS OUTPUT		MBH	248	368	449	576	703	837	1004	1339	1506	1674
STEAM OUTPUT	FROM & @212' F	LB/HR	255	380	462	593	725	862	1035	1380	1552	1725
FIRING RATE, GAS	1,000 BTU/CF	CFH	310	460	561	720	879	1046	1255	1673	1883	2092
FIRING RATE, #2 OIL	140,000 BTU	GPH	2.2	3.2	4	5.1	6.2	7.4	8.9	12	13.4	15
FIRING RATE, #5 & #6 OIL	150,000 BTU	GPH	-	-	-	-	-	-	-	-	-	14
TOTAL HEATING SURFACE		SQ. FT.	37	55	67	86	105	125	150	200	225	250
RADIANT HEATING SURFACE		SQ. FT.	17.4	22.7	23.5	28.7	32.6	34.2	39.3	48	52	55
FURNACE VOLUME		CU. FT.	6.8	7.3	9.2	12.4	14.8	18.7	22.5	27.4	30.7	33
FURNACE HEAT RELEASE		MBH/CU. FT.	46	63	61	58	59.6	56.1	56	61	61.3	63.4
A WIDTH WITHOUT TRIM		IN	28	30	30	30	30	36	36	42	42	42
B WIDTH WITH TRIM		IN	35	37	37	37	37	43	43	49	49	49
C WIDTH WITH GAS TRAIN	APPROX.	IN	47	49	49	49	49	55	55	61	61	61
D BOILER LENGTH		IN	31	31	37	49	60	57	68	58	65	70
E OVERALL LENGTH	W/ STD. BURNER	IN	72	70	80	92	103	100	112	104	111	116
F HEIGHT WITHOUT TRIM		IN	53	63 5/8	63 5/8	63 5/8	63 5/8	63 5/8	63 5/8	78 3/8	78 3/8	78 3/8
G HEIGHT WITH TRIM		IN	60	70	70	70	70	70	70	85	85	85
H BASE HEIGHT		IN	2	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8
I SUPPLY SIZE	30-WTR. & 15-STM.	IN	3	4	4	4	4	4	4	4	6	6
J SUPPLY LOCATION		IN	13 1/2	17	18 1/2	24 1/2	24 1/2	25	30	28 1/2	30 1/2	30 1/2
K RETURN SIZE	30-WTR.	IN	3	3	3	3	3	4	4	4	4	4
L RETURN LOCATION		IN	6 1/4	5	5	5	5	6 1/4	6 1/4	6 3/8	6 3/8	6 3/8
M DRAIN SIZE		IN	1	1	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4
N STACK DIAMETER O.D.		IN	6	8	8	8	8	10	10	12	12	12
O STACK HEIGHT		IN	42 3/8	52 5/8	52 5/8	52 5/8	52 5/8	50 5/8	50 5/8	62 1/8	62 1/8	62 1/8
P REAR SMOKEBOX DEPTH		IN	9 7/8	11 3/4	11 3/4	11 3/4	11 3/4	13 3/4	13 3/4	15 3/4	15 3/4	15 3/4
Q FRONT SMOKEBOX DEPTH		IN	7	8	8	8	8	8	8	10 1/4	10 1/4	10 1/4
R BOILER FIRETUBE DIAMETER		IN	2.5	2	2	2	2	2	2	2	2	2
SHIPPING WEIGHT		LBS.	1500	1700	1800	2000	2100	3100	3350	4000	4400	5300
WATER CAPACITY	(HOT/WATER)	GALS.	72	102	150	175	195	218	267	312	336	356
WATER CAPACITY	(STEAM)	GALS.	58	88	105	138	168	184	224	252	281	305
BOILER HORSEPOWER / MODEL NO.			7.4	11	13.4	17.2	21	25	30	40	45	50

CONNECTIONS 4" & SMALLER ARE FEMALE THREAD, LARGER SIZES ARE 150 LB. FLANGES

AB-3PFB5 SERIES



	60	70	82.2	91.6	101	125	150	165	180	200	232	265	332	400	500	620	650
	2009	2343	2752	3066	3381	4184	5021	5523	6026	6695	7766	8871	11114	13390	16737	20754	21759
	2070	2415	2836	3160	3484	4312	5175	5693	6210	6900	8004	9142	11454	13800	17250	21390	22425
	2510	2929	3439	3832	4226	5231	6277	6904	7532	8369	9708	11089	13892	16738	20922	25943	27198
	17.9	20.9	24.6	27	30.2	37.4	44.8	49.3	53.8	59.8	69.3	79.2	99.2	119.6	149.4	185.3	194.3
	16.7	19.5	22.9	25.6	28.2	34.9	41.8	46	50.2	55.8	64.7	73.9	92.6	111.6	139.5	173	181.3
	300	350	411	458	505	625	750	830	900	1000	1160	1325	1660	2000	2500	3075	3250
	60	77	87	90.5	92	112	121	132	140	150	166	179	207	233	280	327	342
	40.6	52	67	68	73	92	116	132	142	155	188.7	210	261	311.4	361.6	505	535
	62	56.5	51.5	56.6	58.1	57	54.3	52.5	53	54	51.4	53	53.2	53.9	58.1	51.4	51
A	42	48	48	54	54	54	66 3/4	66 3/4	66 3/4	66 3/4	72	72	72	84	84	84	84
B	49	55	55	61	61	61	74	74	74	74	79	79	79	91	91	91	91
C	61	67	67	73	73	73	86	86	86	86	93	93	93	105	105	105	105
D	85	73	85	83 1/4	89 1/4	109 1/4	103 1/4	113 1/4	121 1/4	133 1/4	109 1/4	121 1/4	151 1/4	136 1/2	169 1/2	209 1/2	223 1/2
E	131	124	136	138	144	166	162	172	180	208	185	197	218	211	243	288	305
F	78 3/8	89 1/2	89 1/2	91	91	91	102 1/2	102 1/2	102 1/2	102 1/2	132 7/8	132 7/8	132 7/8	149 1/4	149 1/4	149 1/4	149 1/4
G	85	97	97	99	99	99	113	113	113	113	144 3/8	144 3/8	144 3/8	156	156	156	156
H	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	8	8	8	8 1/8	8 1/8	8 1/8	8 1/8
I	6	6	6	6	6	6	8	8	8	8	8	8	10	10	10	12	12
J	36 1/2	31 1/2	36 1/2	39 5/8	42 5/8	50 5/8	36 5/8	48 5/8	42 5/8	57 5/8	39 5/8	39 5/8	42 5/8	50 3/4	65 1/4	82 3/4	92 3/4
K	4	4	4	4	4	4	6	6	6	6	6	6	8	8	8	10	10
L	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	8	8	8	8	15 1/2	15 1/2	15 1/2	15 3/4	15 3/4	16 3/4	16 3/4
M	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	2	2	2	2	2	2	2	2	2
N	12	14	14	18	18	18	20	20	20	20	22	22	22	28	28	28	28
O	62 1/8	72 1/2	72 1/2	74 5/8	74 5/8	74 5/8	85 3/4	85 3/4	85 3/4	85 3/4	110 1/2	110 1/2	110 1/2	123 7/8	123 7/8	123 7/8	123 7/8
P	15 3/4	17 3/4	17 3/4	21 3/4	21 3/4	21 3/4	23 3/4	23 3/4	23 3/4	23 3/4	25 3/4	25 3/4	25 3/4	31 3/4	31 3/4	31 3/4	31 3/4
Q	10 1/4	11	11	11 1/8	11 1/8	11 1/8	13 1/4	13 1/4	13 1/4	13 1/4	15 1/4	15 1/4	15 1/4	18 3/4	18 3/4	18 3/4	18 3/4
R	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3
	5700	7000	8800	9100	9500	10200	12000	13750	15000	16000	19000	20000	24000	29000	38200	48000	51000
	436	471	574	608	647	794	856	1136	1211	1333	1477	1594	2056	2400	3013	3690	3942
	366	383	457	500	528	648	648	913	957	1053	1152	1233	1605	1850	2329	2843	3018
	60	70	82.2	91.6	101	125	150	165	180	200	232	265	332	400	500	620	650

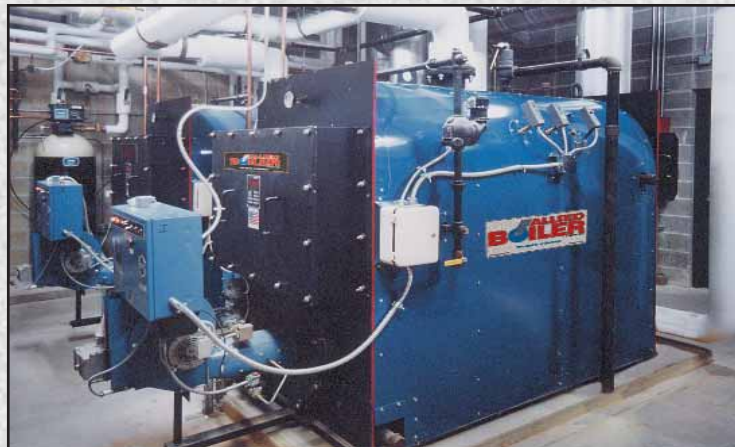
CONSULT ALLIED BOILER FOR LARGER SIZES

★ DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE, CERTIFIED DRAWINGS AVAILABLE UPON REQUEST

■ ALLIED WORK FORCE BOILERS ■

STANDARD FEATURES-SERIES AB-3PFB5

- Efficient 3-Pass Design
- Flexibility – Gas, Oil, Heavy Oil, and Combination Gas/Oil
- ASME Code Constructed & Stamped for 15 PSI Steam/30 Water
- Registered with the National Board of Boiler Inspectors
- Competitively Priced, Easily Maintained, Designed for Efficiency
- Large Furnace Volume for Ultimate Combustion Efficiency
- Unified Refractory Base Floor
- Steel Skids and Lifting Eyes
- Low Heat Release - 5 Sq. Ft./HP
- Factory Insulated – 2” Mineral Wool
- Factory Jacketed & Painted
- Easy Access to Fireside Surfaces
- Ample Waterside Cleanout Openings
- Fully Automatic Operation
- U.L. Listed, Forced Draft Burners
- Wet Back Construction
- U.L. Listed Controls & Trim
- Factory Test Fired
- Flame Observation Ports
Front & Rear



STANDARD FEATURES — SERIES AB-3PFB5

All units are factory packaged with operating controls, relief valves, burner and fuel train. Installation is made simple in that only service connections are needed to place in operation. Flexible burner systems are available for firing natural gas, LP gas, #2 oil, heavy oil, or combinations. High density 2” mineral wool insulation assures lower radiant heat loss. In addition to meeting the requirements of U.L., burner systems are optionally available to meet the requirements of FM, IRI, MILITARY and others.

STEAM TRIM:

Steam pressure gauge with syphon and test-cock; combination low water cut-off and pump control (or feeder); auxiliary low water cut-off with manual reset; water column gauge glass set and drain valve; ASME safety relief valve(s); operating and high limit pressure control.

WATER TRIM

Combination pressure and temperature gauge; low water cut-off control with manual reset; ASME relief valve(s); operating and high limit temperature controls.

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The Spirit of Service

alliedboiler.com

ALLIED
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& SUPPLY INC.

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