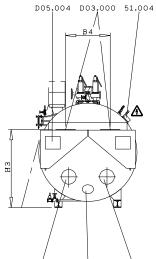
UNIVERSAL steam boiler ZFR

in three-pass flame-tube smoke-tube technology



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D05.002 D05.001 D05.002

Terminal box
Burner 1 (left burner)
Burner 2 (right burner)
Flue gas connection socket
Flue gas chamber
Reversing chamber door
Inspection opening steam-side
Inspection opening water side
Inspection opening flue gas side
Inspection opening flue gas side
Sight hole
Base frame
Lifting lug
Operating platform option
Pressure safeguard valve 1
Pressure safeguard valve 2 option
Steam shut-off valve

D14,013 D14,005 D05,000 D16,005 D08,000 D13,001	
D14,001 D14,002 D15,001 D09,000 D08,100 D06,002 D13,002 D	16,006 / D15,006 / D07,000
	/ / _{B1} / _ /
	1 / /B2 / 1
	E C
	B3'
DOG 000 D16 002 D05 005 D12 503 D03 002	A01 000 A01 100 D12 001 D12 002

D06.000 D16.002 D05.005 D12.503 D03.002 A01.000 A01.100 D12.001 D12.002

D12.001	Drain shut-off valve
D12.002	Quick shut-off blow down valve
D12.503	Connection for drainage flue gas condensate
D13.001	Feed water shut-off valve
D13.002	Feed water non-return valve
D14.001	Pressure indicator (with test unit)
D14.002	Pressure limiter
D14.005	Shut-off valve
D14.013	Pressure transducer
D15.001	Level indicator 1
	Level indicator 2 option
D15.003	Level transducer
D15.006	Level limiter
D16.002	Desalting shut-off valve option 4)
D16.005	Desalting control valve option
D16.006	Conductivity transducer option

Explanation of symbols



Warning: dangerous electrical voltage



Lifting equipment to be fastened here, only



Warning: hot surface, e. g. uninsulated fitting

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UNIVERSAL steam boiler	Dimension(s)							Flue gas connection			
	L 1 ²⁾	L 2 ^{1) 5)}	L 3	L 4	B 1	B 2 ¹⁾	H 1 ³⁾	H 2 ¹⁾	L 11	B 4	H 3
Туре	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
ZFR 20000	8679	7160	5575	1075	3817	3700	4924	4012	603	1500	2850
ZFR 23000	9069	7550	5825	1215	4017	3900	5128	4216	673	1500	3054
ZFR 28000	10039	8570	6655	1355	4117	4000	5232	4320	743	1500	3158
ZFR 30000	10039	8670	6655	1355	4267	4200	5604	4507	743	1800	3345
ZFR 35000	10685	9090	7075	1355	4467	4400	5794	4697	743	1850	3535
ZFR 40000	10935	9340	7325	1355	4467	4400	5874	4697	743	1850	3535
ZFR 50000	10668	9780	7575	1495	4767	4700	6187	5010	813	1850	3848
ZFR 55000	11658	10530	8325	1495	4767	4700	6422	5020	813	1850	3848

UNIVERSAL steam boiler	Base frame							
	L 5	L 6	L 7	L 8	L 9	L 10	В3	wide flange beam
								[IPB - HEB - DIN1025]
Туре	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
ZFR 20000	4325	3725	925	625	300	225	2470	260
ZFR 23000	4575	3975	925	625	300	225	2600	280
ZFR 28000	5225	4625	925	625	300	225	2700	300
ZFR 30000	5375	4775	850	550	300	225	2800	300
ZFR 35000	5500	4900	950	650	300	225	2900	300
ZFR 40000	5500	4900	1120	820	300	225	2900	300
ZFR 50000	5500	4900	1335	1035	300	425	3100	300
ZFR 55000	6250	5650	1335	1035	300	425	3100	300

• References and defaults to Requirements for the boiler installation room see technical information TI024.

• Equipment and complete dimensions in accordance with project-related, technical data sheet.

- The scope of delivery is defined in the order confirmation.
- The boiler operating weight must be absorbed by the foundation in the area of the front and rear supports.
- Where dimensions or weights are specified on the datasheet, the following tolerances apply: measurements ± 1%; transportation weight ± 4%; maximum weight ±2% (also refer to Technical information TI024, chapter Pipe system)
- The dimensions are designed for standard insulation:

150 mm thick on the boiler ends 175 mm thick at the rear end

100 mm thick on the boiler shell

- Dimensioning insertion opening:
 - Positioning height: addition of at least 100 mm to dimension H1 resp. dimension H2 (mounted / not mounted fittings)
 - Positioning width: addition of at least 200 mm to dimension B1 resp. dimension B2 (mounted / not mounted fittings)
- The height of the boiler house is determined by the system equipment. The clear passage over the operating platform should be at least 2 m.
- ¹⁾ Smallest transport dimensions once fittings, burner and terminal box have been removed (without cable ducting; with cable ducting 2 x + 75 mm).
- ²⁾ Dimension L1 is an standard gauge and depends on the make, type and rated capacity of burner.
- ³⁾ Dimension H1 may vary acc. to valve manufacturer.
- ⁴⁾ Depending on the hydrochemical mode of the boiler, 2 nozzles are provided with the corresponding valves (if included in the scope of delivery) if necessary.
- ⁵⁾ In case of superheater boiler ZFR-X, dimension L2 increases. See data sheet DA003 Fire Tube Dimensions and Burner Add-On Limits.