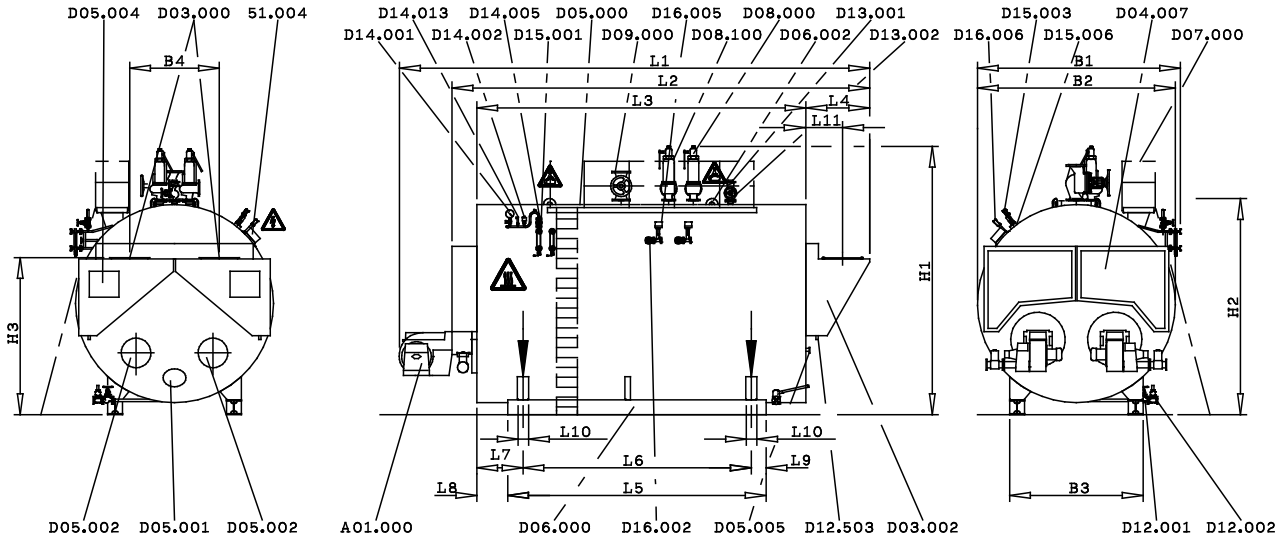
UNIVERSAL high-pressure steam boiler ZFR

in three-pass double-flue flame-tube smoke tube technology

DA023
Version 1 (07/12)



51.004	Terminal box
A01.000	Burner
D03.000	Flue gas connection socket
D03.002	Flue gas chamber
D04.007	Reversing chamber door
D05.001	Inspection opening water side
D05.002	Inspection opening flue gas side
D05.004	Cleaning opening flue gas side
D05.005	Sight hole
D06.000	Base frame
D06.002	Transportation lug
D07.000	Operating platform **Option**
D08.000	Pressure safeguard valve 1
D08.100	Pressure safeguard valve 2 **Option**
D09.000	Steam shut-off valve
D12.001	Drain shut-off valve
D12.002	Quick shut-off blow-down valve
D12.503	Connection for drainage flue gas condensate
D13.001	Feet water shut-off valve
D13.002	Feet water non-return valve
D14.001	Pressure indicator (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** [4)]
D16.006	Conductivity transmitter **Option**

Explanation of symbols


Warning: dangerous electrical voltage


Lifting equipment to be fastened here, only


Warning: hot surface, e. g. uninsulated fitting

Subject to change

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UNIVERSAL High pressure steam boiler Type	Dimensions								Flue gas connection		
	L 1 [2] [mm]	L 2 [1) 5)] [mm]	L 3 [mm]	L 4 [mm]	B 1 [mm]	B 2 [1)] [mm]	H 1 [3)] [mm]	H 2 [1)] [mm]	L 11 [mm]	B 4 [mm]	H 3 [mm]
ZFR 20000	8999	7160	5575	1075	3817	3700	4819	4057	678	1500	2870
ZFR 23000	9389	7550	5825	1215	4017	3900	5023	4246	678	1500	3059
ZFR 28000	10598	8570	6655	1355	4117	4000	5232	4350	748	1500	3163
ZFR 30000	10598	8670	6655	1355	4317	4200	5607	4522	748	1800	3350
ZFR 35000	10409	9090	7075	1355	4517	4400	5792	4712	748	1900	3540
ZFR 40000	10598	9340	7325	1355	4617	4400	5609	4712	748	1900	3540
ZFR 50000	10604	9780	7575	1495	4817	4700	6407	5085	818	1900	3853
ZFR 55000	11139	10530	8325	1495	4817	4700	6187	5085	818	1900	3853

UNIVERSAL High pressure steam boiler Type	Base frame							
	L 5 [mm]	L 6 [mm]	L 7 [mm]	L 8 [mm]	L 9 [mm]	L 10 [mm]	B 3 [mm]	Universal columne IPB - HEB - DIN 1025 [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	1325	1025	300	425	3100	300
ZFR 55000	6250	5650	1325	1025	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 boiler operating weight must be absorbed by the foundation in the area of the front and rear supports.
- Dimensions with ± 1% tolerance.
- 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
- Dimension of the insertion openings
  - opening height: Add at least 100 mm to H1 or H2 (with / without assembled fittings)
  - opening width: Add at least 200 mm to B1 or B2 (with / without assembled 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 with 100 mm insulation thickness if fittings, pump bracket and burner are removed (without cable ducting; with cable ducting +75 mm on right).

2) Dimension L1 is an standard gauge and depends on the make, type and rated capacity of burner.

3) The dimension H1 may vary depending on the valve manufacturer.

4) The boiler type ZFR 28000 has basically 2 desalting nozzles.

6) In case of superheater boiler ZFR-X, dimension L2 increases. See data sheet **DA003** Fire Tube Dimensions and Burner Add-On Limits.

Subject to change