

## Main dimensions

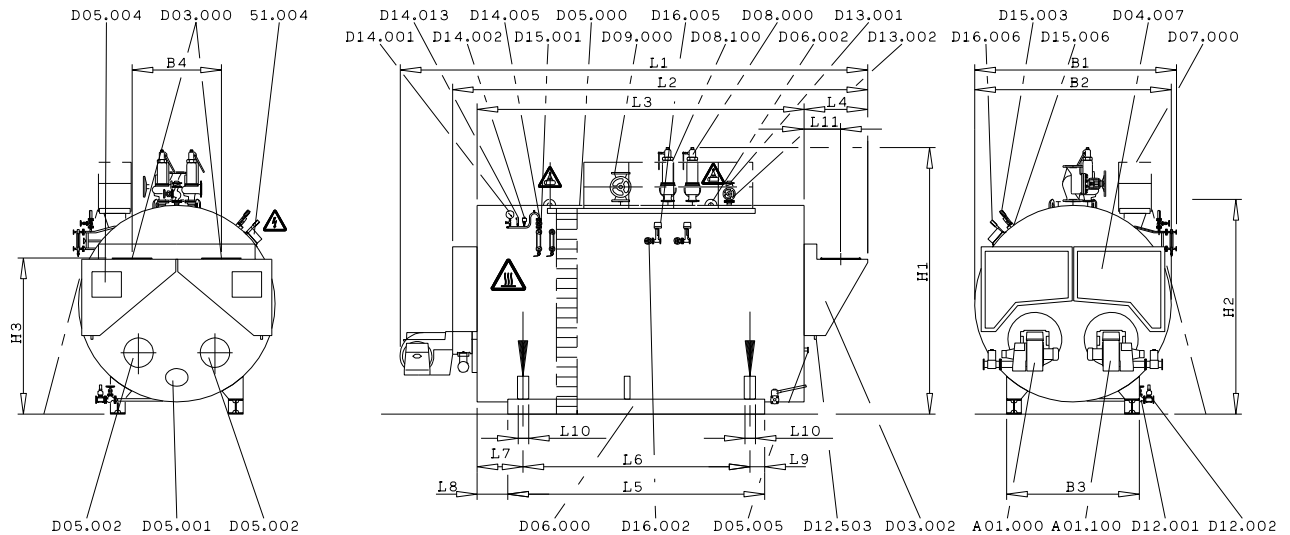


# UNIVERSAL steam boiler ZFR

in three-pass flame-tube smoke-tube technology

DA023

Version 2 (12/19)



- |         |  |         |   |
|---------|--|---------|---|
| 51.004  | terminal box                             | D12.001 | Drain shut-off valve                        |
| A01.000 | Burner 1 (left burner)                   | D12.002 | Quick shut-off blow down valve              |
| A01.100 | Burner 2 (right burner)                  | D12.503 | Connection for drainage flue gas condensate |
| D03.000 | Flue gas connection socket               | D13.001 | Feed water shut-off valve                   |
| D03.002 | Flue gas chamber                         | D13.002 | Feed water non-return valve                 |
| D04.007 | Reversing chamber door                   | D14.001 | Pressure indicator (with test unit)         |
| D05.000 | Inspection opening steam-side            | D14.002 | Pressure limiter                            |
| D05.001 | Inspection opening water side            | D14.005 | Shut-off valve                              |
| D05.002 | Inspection opening flue gas side         | D14.013 | Pressure transducer                         |
| D05.004 | Inspection opening flue gas side         | D15.001 | Level indicator 1                           |
| D05.005 | Sight hole                               |         | Level indicator 2 <b>option</b>             |
| D06.000 | Base frame                               | D15.003 | Level transducer                            |
| D06.002 | Lifting lug                              | D15.006 | Level limiter                               |
| D07.000 | Operating platform <b>option</b>         | D16.002 | Desalting shut-off valve <b>option</b>      |
| D08.000 | Pressure safeguard valve 1               | D16.005 | Desalting control valve <b>option</b>       |
| D08.100 | Pressure safeguard valve 2 <b>option</b> | D16.006 | Conductivity transducer <b>option</b>       |
| D09.000 | Steam shut-off valve                     |         |   |

### 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 Type	Dimension(s)								Flue gas connection		
	L 1 <sup>2)</sup> [mm]	L 2 <sup>1)5)</sup> [mm]	L 3 [mm]	L 4 [mm]	B 1 [mm]	B 2 <sup>1)</sup> [mm]	H 1 <sup>3)</sup> [mm]	H 2 <sup>1)</sup> [mm]	L 11 [mm]	B 4 [mm]	H 3 [mm]
ZFR 20000	8679	7160	5575	1075	3817	3700	4924	4012	603	1500	2850
ZFR 23000	8938	7550	5825	1215	4017	3900	5128	4216	673	1500	3054
ZFR 28000	9923	8570	6655	1355	4117	4000	5232	4320	743	1500	3158
ZFR 30000	9923	8670	6655	1355	4267	4200	5604	4507	743	1800	3345
ZFR 35000	10298	9090	7075	1355	4467	4400	5794	4697	743	1850	3535
ZFR 40000	10953	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 Type	Base frame							wide flange beam [IPB - HEB - DIN1025] [mm]
	L 5 [mm]	L 6 [mm]	L 7 [mm]	L 8 [mm]	L 9 [mm]	L 10 [mm]	B 3 [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.
  - Dimensions with  $\pm 1\%$  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
  - 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 a standard gauge and depends on the make, type and rated capacity of burner.
  - 3) Dimension H1 may vary acc. to valve manufacturer.
  - 4) The boiler type ZFR 28000 has basically 2 desalting nozzles.
  - 5) In case of superheater boiler ZFR-X, dimension L2 increases. See data sheet DA003 Fire Tube Dimensions and Burner Add-On Limits.