



reflex 'hot water heater' Because your family deserves the best!

reflex 'hot water heater' Fulfil all wishes

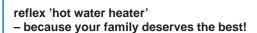
Energy saving is higher on the agenda than ever before. Improved standard of living has led to increasing hot water demand. House owners insist more and more on having a dependable, efficient and energy saving water heating system which gives them the most for their money and plentiful supplies of hot water anywhere at anytime.

The reflex glass-lined water heaters are an outstanding example in this respect, as in addition to a whole range of capacities, they offer outstanding performance and exceptional convenience without leaving out aspects such as long service life and economy. Suitable for domestic water heating, solar applications as well as heavy duty hot water requirements in sport accommodations, hotels, schools, factories, etc.

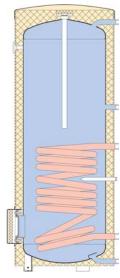


Quality "made by Reflex" Glass-fused-to-steel: tank protection for life

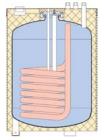
- heavy duty S235JRG2 (RSt 37-2) quality steel
- corrosion resistant glass-lined tank according to German DIN 4753 standards
- well-positioned glass-lined heat exchanger for optimal heat transfer
- large heating surface for quick heating recovery
- magnesium anode rod for additional protection



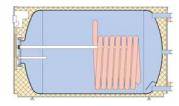
- 5 year warranty on glass-lined tank
- max. working pressure tank : 10 bar heat exchanger : 16 bar
- extra thick PU-foam insulation without CFC
- practical packaging for efficient transportation
- various jacket colours available
- large variety of accessories



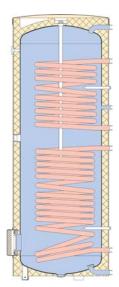
reflex 'SB/SF indirect hot water heater'



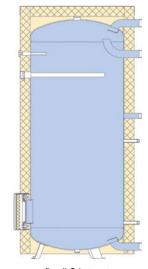
reflex 'SF indirect hot water heater' 120 ltr



reflex 'US horizontal hot water heater'



reflex 'SB/2 and SF/2 solar hot water heater'



reflex 'LS hot water storage tank'

Glass-lined tank

3

Anode

- optimal protection against corrosion
- maintenance free power anode available as accessory

steel and glass are fused together to achieve the best of both materials- the strength and engineering flexibility of steel and the corrosion resistance of glass

- ▶ 1st class water with respect to hygiene and taste
- smooth glass-lined which prevents formation of lime deposits on surface

Insulation / Jacket

for the separate integration of the circulation pipe

Circulation connection

- extra thick Polyurethane insulation (CFC free) for minimum heat loss
- steel jacket available in various colours to suit each boiler combination
- from 750 and above, insulated jacket in soft foam will delivered in additional package

Pocket tube

- for holding a temperature sensor
- for the measurement of the water temperature in the storage tank, not at the vessel wall
- for 'SB/2 and SF/2 solar hot water heater' one pocket tube per heating spiral
- for 'LS hot water storage tanks': 2 sensor locations are provided for differential temperature regulation

Heating coil

- large heating surface for quick recovery period
- heating coil designed to prevent the formation of cold zones and thus contamination with bacteria

Inspection hole

- from 150 litres
- facilitates cleaning and maintenance
- could be used to install an additional electrical heating element or auxiliary heat exchanger

Impact plates

- avoid turbulences by the fresh water that continues flowing
- indispensable for an optimum storage charge and a stable stratification



"reflex 'water heaters': Perfect quality and technology, of course! And the packaging that is designed as sliding aid facilitates the transport."



reflex 'hot water heater' Technical data

reflex 'SB/SF hot water heater'

- In floor standing indirect fired water heater
- heavy duty S235JRG2 (RSt 37-2) quality steel
- corrosion resistant glass-lined tank according to German DIN 4753
- factory mounted thermometer
- extra thick (50-80 mm) CFC free foam insulation

SB models : steel jacket in various

colours

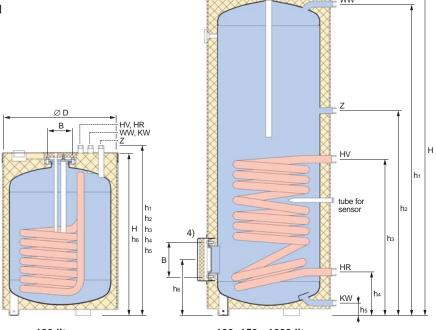
SF 120 : foil jacket in white

colour

SF 750/1000 : soft foam white jacket

delivered separately

- clean-out and inspection access opening (except for 'SB 100')
- magnesium anode rod for tank protection ('SF 750 + 1000': 2 anodes)
- high capacity, low pressure drop, glass-lined heat exchanger
- max. working pressure
 10 bar (tank), 16 bar (heat exchanger)
- max. working temperature 95°C (tank), 110°C (heat exchanger)



120 litres

100, 150 - 1000 litres	10	00.	150	- 1000	litres
------------------------	----	-----	-----	--------	--------

Model		SB 100	SF 120	SB 150	SB 200	SB 300	SB 400	SB 500	SF 750 ¹⁾	SF 1000 1)
Capacity	litres	98	115	158	198	300	385	478	750	982
Diameter	Ø D mm	512	560	540	540	700	700	700	910 2)	1010 ³⁾
Height	H mm	849	800	1222	1473	1334	1631	1961	2000 2)	2025 ³⁾
Weight	kg	38	42	54	65	99	119	170	227	288
Heating surface	m²	0,61	0,71	0,75	0,95	1,45	1,8	1,9	3,7	4,5
Hot water outlet WW	R	3/4	3/4	3/4	3/4	1	1	1	1 ¹ / ₄	1 ¹ / ₄
	h₁ mm	740	835	1106	1366	1226	1523	1853	1886	1900
Cold water inlet KW	R	3/4	3/4	3/4	3/4	1	1	1	1 ¹ / ₄	1 1/4
	h₅ mm	55	835	55	55	55	55	55	99	103
Circulation Z	R	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
	h ₂ mm	605	835	732	899	918	1111	1264	1417	1489
Boiler supply HV	R	1	3/4	1	1	1	1	1	1 ¹ / ₄	1 ¹ / ₄
	h ₃ mm	523	835	596	686	720	908	965	1314	1324
Boiler return HR	R	1	3/4	1	1	1	1	1	1 ¹ / ₄	1 ¹ / ₄
	h ₄ mm	193	835	191	191	220	220	220	288	296
Flange 4)	h ₆ mm	248	800	246	246	275	275	275	378	387
	B mm	Rp 1 ¹ / ₂	125	150	150	150	150	150	225	225
Heating capacity 5)	kW	19	22	25	31	48	57	65	99	110
Continuous rating 5) $\Delta T = 35$	°C Itr/h	467	541	614	762	1179	1401	1597	2433	2703
Recovery rate 5) $\Delta T = 50$	°C min	18	18	22	22	22	24	26	27	31
Performance 5) $\Delta T = 35$	°C ltr/10 min	204	238	306	382	583	729	881	1371	1714
	Itr/1st hour	593	689	818	1017	1566	1896	2212	3398	3967
Article No. Colou	r blue	7763000		7750100	7750200	7750300	7750400	7750500		
	orange	7763100		7750600	7750700	7750800	7750900	7751000		
	silver	7763900		7764100	7764200	7764300	7764400	7764500		
	white	7763800	7759600	7763600	7763300	7763400	7763500	7763700	7754600	7754700

^{1) &#}x27;SF 750 and 1000' is delivered with 2 anodes and with soft foam white jacket delivered separately

 $^{^{2)}}$ without insulation \varnothing D = 750 mm, H = 1932 mm

without insulation \varnothing D = 850 mm, H = 1959 mm

⁴⁾ from 150 ltr various electrical heating inputs could be fitted on flange (to be purchased separately \rightarrow see page 7)

⁵⁾ performance rating based on ΔT_{boiler} = 80-60°C, T_{storage} = 60°C, T_{mixed} water = 45°C, T_{cold} water = 10°C

reflex 'hot water heater' **Technical data**

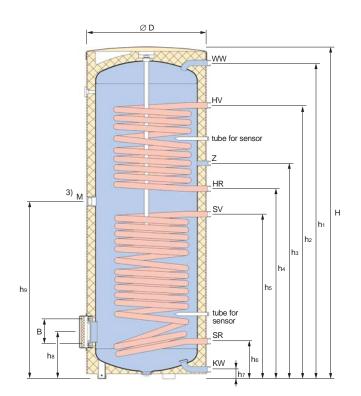
reflex 'SB/2 and SF/2 solar hot water heater'

- Indirect/solar water heater
- heavy duty S235JRG2 (RSt 37-2) quality steel
- corrosion resistant glass-lined tank according to German DIN 4753
- factory mounted thermometer
- extra thick (50-80 mm) CFC free foam insulation

SB models : steel jacket in various colours SF 300/2* : foil jacket in grey colour SF 750/1000/2 : soft foam white jacket

delivered separately

- laction clean-out and inspection access opening
- extra 1½" plug for eventual use of electrical element
- magnesium anode rod for tank protection
- b double coil, high capacity, low pressure drop, glass-lined heat exchangers
- max. working pressure 10 bar (tank), 16 bar (heat exchangers)
- max. working temperature 95°C (tank), 110°C (heat exchangers)



Model				SB 300/2	SF 300/2*	SB 400/2	SB 500/2	SF 750/2	SF 1000/2
Capacity	li	itres		295	298	380	470	750	995
Diameter	Q	Ø D mm		600	700	700	700	910 1)	1010 2)
Height	H	H mm		1834	1334	1631	1961	2000 1)	2025 2)
Weight	k	кg		124	106	140	180	217	275
Heating surface	ι	upper / m²		0,80	0,85	1,05	1,30	1,17	1,12
	le	ower / m²		1,55	1,45	1,80	1,90	1,93	2,45
Hot water outlet WW	F	R		1	1	1	1	1 1/4	1 ¹ / ₄
	h	n₁ mm		1725	1226	1523	1853	1887	1905
Cold water inlet KW	F	R		1	1	1	1	1 ¹ / ₄	1 ¹ / ₄
		n7 mm		90	55	55	55	99	103
Circulation Z	h	n₃ mm, R ³	/4	1179	625	1111	1264	1242	1243
Boiler supply HV	h	n2 mm, R 1		1424	1048	1354	1604	1467	1423
Boiler return HR	r	n4 mm, R 1		1064	790	1006	1114	1151	1153
Solar supply SV	h	n₅ mm, R 1		964	715	909	965	830	884
Solar return SR	h	n ₆ mm, R 1		254	220	220	220	288	297
Flange	<u>h</u>	ns mm		324	275	275	275	378	387
		3 mm		150	150	150	150	225	225
Plug for elec. element 3)) h	ng mm, Rp	1 ¹ / ₂	1013	755	957	1040	1005	1025
upper coil/heating									
Heating capacity 4)	k	κW		26	26	31	40	33	32
Continuous rating 4) $\Delta T =$	= 35°C 1	tr/h		639	639	762	983	811	786
	= 50°C r	min		40	40	43	41	80	109
Performance $^{4)}$ $\Delta T =$	= 35°C <u>I</u> 1	tr/10 min		486	490	616	769	1100	1418
	lt	tr/1st hour		1019	1022	1251	1588	1776	2073
lower coil/solar									
Heating capacity 4)		κW		48	48	57	65	60	76
Continuous rating 4) $\Delta T =$	= 35°C 1	tr/h		1179	1179	1401	1597	1474	1867
Recovery rate 4) $\Delta T =$	= 50°C r	min		22	22	23	25	44	46
		tr/10 min		576	580	722	871	1211	1598
ltr/1	I st hour			1559	1810	2193	2586	2890	3692
Article No. Col	lour k	blue		7740500		7761200	7757000		
	C	orange 📉		7760600		7767100	7740700		
	5	silver		7741600		7742300	7741700		
	V	white		7742200		7742400	7707500	7743200	7743300
	Ç	grey			7753300				



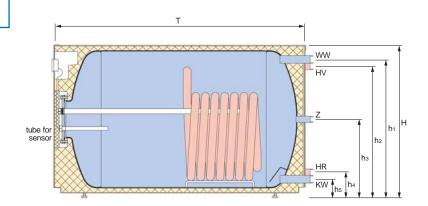
without insulation \varnothing D = 750 mm, H = 1932 mm $^{2)}$ without insulation \varnothing D = 850 mm, H = 1959 mm



reflex 'hot water heater' Technical data

reflex 'US hot water heater'

- horizontal indirect fired water heater
- heavy duty S235JRG2 (RSt 37-2) steel
- corrosion resistant glass-lined tank according to German DIN 4753
- ▶ factory mounted thermometer
- extra thick (50 mm)
 CFC free foam insulation
- steel jacket in various colours to match installation
- robust frame to carry 240 kg
- magnesium anode rod for tank protection
- high capacity, low pressure drop, glass-lined heat exchanger
- max. working pressure
 10 bar (tank), 16 bar (heat exchanger)
- max. working temperature 95°C (tank), 110°C (heat exchanger)



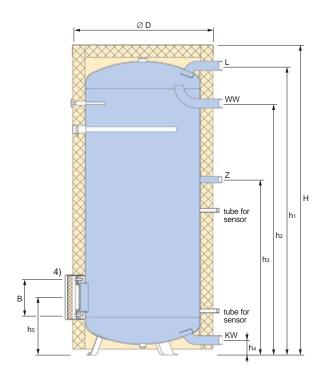
Model			US 150	US 250	
Capacity		litres	150	250	
Height		H mm	590	644	
Width		T mm	995	1095	
Weight		kg	72	99	
Heating surface		m²	0,9	0,9	
Hot water outlet V	VW	R	1	1	
		h ₁ mm	485	580	
Cold water inlet K	W	R	1	1	
		h₅ mm	95	60	
Circulation Z		R	3/4	3/4	
		h₃ mm	290	320	
Boiler supply HV		R	3/4	3/4	
		h ₂ mm	380	552	
Boiler return HR		R	3/4	1	
		h ₄ mm	380	90	
Heating capacity)	kW	30	30	
Continuous rating	$^{1)}\Delta T = 35^{\circ}C$	ltr/h	737	737	
Recovery rate 1)	$\Delta T = 50$ °C	min	18	29	
Performance 1)	rformance 1) $\Delta T = 35^{\circ}C$		316	445	
		Itr/1st hour	930	1059	
Article No.	Colour	blue	7762000	7762500	
		orange	7762100	7762600	
		silver	7765000	7765100	
		white	7761900	7761300	

 $^{^{1)}}$ performance rating based on $\Delta T_{boiler} = 80\text{-}60^{\circ}\text{C}, \, T_{storage} = 60^{\circ}\text{C}, \, T_{mixed water} = 45^{\circ}\text{C}, \, T_{cold water} = 10^{\circ}\text{C}$

reflex 'LS hot water storage tank'

- In floor standing storage tank
- heavy duty S235JRG2 (RSt 37-2) quality steel
- corrosion resistant glass-lined tank according to German DIN 4753
- ▶ factory mounted thermometer
- extra thick (80 mm) CFC free soft foam insulation and jacket (delivered separately)
- laction clean-out and inspection access opening
- possibility to mount electrical heating element on clean out flange
- magnesium anode rod for tank protection
- max. working pressure 10 bar
- max. working temperature 95°C

Model		LS 750	LS 1000
Capacity	litres	750	1000
Diameter	Ø D mm	910 1)	1010 ²⁾
Height	H mm	2010 1)	2035 2)
Weight	kg	182	233
Hot water outlet WW	R	2	2
	h ₂ mm	1638	1646
Cold water inlet KW	R	2	2
	h ₄ mm	88	92
Battery charging L 3)	R	2	2
	h ₁ mm	1908	1911
Circulation Z	R	1 ¹ / ₄	1 ¹ / ₄
	h ₃ mm	1143	1154
Flange 4)	h₅ mm	378	386
	B mm	225	225
Article No. Colour	white	6500000	6500100



- $^{1)}$ without insulation \varnothing D = 750 mm, H = 1932 mm
- without insulation \varnothing D = 850 mm, H = 1959 mm
- ³⁾ when used with heat exchangers systems
- $^{ ext{-}}$ various electrical heating inputs could be fitted on flange (to be purchased separately ightarrow see page 7)

Accessories (available on demand)

▶ 'EEHR Screw-in (1½") heating element' (to be ordered with separate flange & gasket)

Input	Voltage	Model
3.0 kW	230 V	150 - 1000 ltr
4.5 kW	400 V	300 - 1000 ltr
6.0 kW	400 V	300* - 1000 ltr

- * not for 'SF 300/2' Ø D 600 mm
- 'EFHR Flange type heating element' (includes mounting flange & gasket)

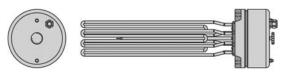
Input	Voltage	Model
4.0 kW	400 V	150 - 500 ltr
6.0 kW	400 V	300 - 500 ltr
8.0 kW	400 V	300* - 500 ltr
10.0 kW	400 V	300* - 500 ltr
16.0 kW	400 V	750 - 1000 ltr
19.0 kW	400 V	1000 ltr

- * not for 'SF 300/2' Ø D 600 mm
- additional heat exchanger
- control thermostat
- power anode











Reflex – responsibility in the interests of the environment

New Reflex technologies are to provide advantages not only to human beings, but also to the environment. This is the principle on which we base all our development, planning, and manufacturing.

We comply with our responsibility as manufacturer by the purposeful selection of materials and production technologies - the environmental - impacts are as low as possible.







Reflex Winkelmann GmbH + Co. KG

Gersteinstraße 19 59227 Ahlen Germany

Phone: +49 23 82/70 69-0 Fax: +49 23 82/70 69-558

www.reflex.de