



Product Guide 2012

Edition EN



Reflex – You can depend on us!

The Reflex brand name is well known in Europe and throughout the world as a major leader in pressure control technology for heating, chilled and potable water applications. Our world wide growth has allowed us to build several state-of-the-art manufacturing facilities supplying the industry with outstanding quality products.

Reflex Winkelmann GmbH having its headquarters in the Westfalian city of Ahlen is not only a recognized leader in expansion vessels but also a significant manufacturer of advanced system solutions such as compressor and pump-controlled pressurization systems, automatic air separation systems and hot water heaters.

Reflex has achieved its significant global growth today thanks to the unique combination of its world-class manufacturing skills, dedication to high-product quality at an affordable price and its commitment to continuous technical training of its people, our most precious resource.

Our tradition goes back to 1898. This family oriented company started its core business in the elaboration of steel. A business in which we are recognised leaders today. The Heinrich Winkelmann Group form the parent company to a whole group of diversified manufacturing companies serving the heating segment and the whole automotive industry with over 2.500 employees. A tradition of more than a hundred years in this business makes us real experts today.



- Reflex -
Factory Ahlen (DE)



- Reflex -
Factory Wabrzezno (PL)





Pressurization systems

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reflex Accessories and reflex 'ex-separators'

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About Reflex

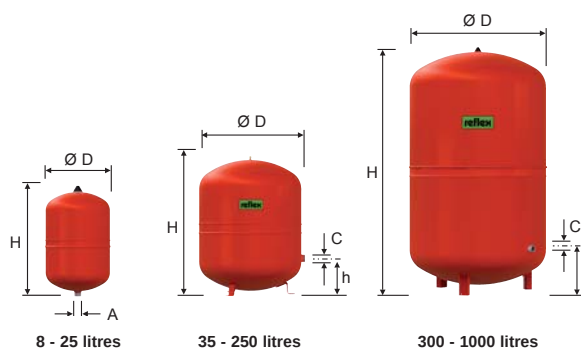
Reflex International



64 - 65

'reflex NG and N'

- ▶ for heating and cooling water applications
- ▶ threaded connections
- ▶ non-replaceable diaphragm, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ meets or exceeds EC norms for pressure vessels 97/23/CE
- ▶ colour: red or white, durable powder coating finish
- ▶ preset pressure 1.5 bar (Nitrogen)



Type	Article-No.	Weight	Product	Qpp*	Ø D	H	h	C
6 bar / 120 °C	red white	kg	group		mm	mm	mm	
NG 8	7230100 7230107	1.7	10	96	206	285	---	R ¾
NG 12	7240100 7240107	2.3	10	72	280	275	---	R ¾
NG 18	7250100 7250107	2.8	10	56	280	345	---	R ¾
NG 25	7260100 7260107	3.5	10	42	280	465	---	R ¾
NG 35	7270100 7270107	5.7	10	24	354	460	130	R ¾
NG 50	7001000 7001100	7.5	11	24	409	493	175	R ¾
NG 80	7001200 7001300	9.9	11	12	480	565	175	R 1
NG 100	7001400 7001500	11.2	11	10	480	670	175	R 1
NG 140	7001600 7001700	14.5	11	8	480	912	175	R 1

6 bar / 120 °C									
N 200	7213300	---	36.7	18	4	634	760	205	R 1
N 250	7214300	---	45.0	18	---	634	890	205	R 1
N 300	7215300	---	52.0	18	---	634	1060	235	R 1
N 400	7218000	---	65.0	18	---	740	1070	245	R 1
N 500	7218300	---	79.0	18	---	740	1290	245	R 1
N 600	7218400	---	85.0	18	---	740	1530	245	R 1
N 800	7218500	---	103.0	18	---	740	1995	245	R 1
N 1000	7218600	---	120.0	18	---	740	2410	245	R 1

↑ V_n Nominal volume [Litres]

reflex 'Wall hung holder' for vessels 8 - 25 litres

- ▶ bracket with tightening strap for vertical mounting

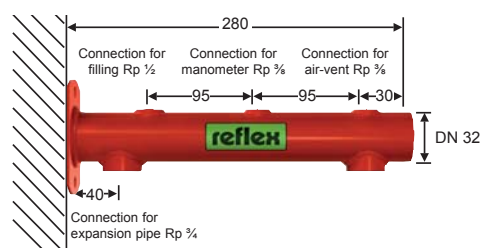
Article-No.	Product group	Qpc**
8 - 25 l	7611000	75 36



* = Quantity per pallet
** = Quantity per carton

- ▶ holder with multiple connections

Article-No.	Product group
8 - 25 l	7612000 75



reflex 'AM Connection nut' for vessels 8 - 25 litres

- ▶ incl. O-Ring

Article-No.	Product group	Qpc**
8 - 25 l	9119400	84 10

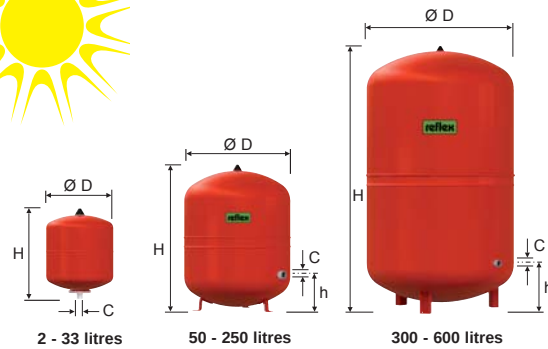


Diaphragm type expansion vessels for heating, cooling and solar applications

'reflex'

'reflex S'

- ▶ for solar, heating and cooling water applications
- ▶ suitable for anti-frost mixture up to 50%
- ▶ threaded connections
- ▶ non-replaceable diaphragm, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ 33 litres with wall-hung clip
- ▶ meets or exceeds EC norms for pressure vessels 97/23/CE
- ▶ colour: red or white, durable powder coating finish



Type	Article-No.	Weight	Product	Qpp*	Ø D	H	h	C	Pre-set pressure
10 bar / 120 °C	red white	kg	group		mm	mm	mm		bar
S 2	9707700 ---	1.1	14	280	132	260	---	G 3/4	0.5
S 8	9703900 9702600	2.5	14	96	206	325	---	G 3/4	
S 12	9704000 9702700	3.5	14	72	280	300	---	G 3/4	
S 18	9704100 9702800	4.5	14	56	280	380	---	G 3/4	1.5
S 25	9704200 9702900	5.5	14	42	280	500	---	G 3/4	
S 33	9706200 9706300	6.3	14	24	354	450	---	G 3/4	

S 50	7209500 ---	13.2	19	20	409	469	168	R 3/4	
S 80	7210300 ---	18.4	19	12	480	538	166	R 1	
S 100	7210500 ---	22.7	19	10	480	644	166	R 1	
S 140	7211500 ---	29.0	19	---	480	886	166	R 1	
S 200	7213400 ---	40.0	19	---	634	760	205	R 1	3.0
S 250	7214400 ---	48.0	19	---	634	890	205	R 1	
S 300	7215400 ---	54.0	19	---	634	1060	235	R 1	
S 400	7219000 ---	78.0	19	---	740	1070	245	R 1	
S 500	7219100 ---	80.0	19	---	740	1290	245	R 1	
S 600	7219200 ---	103.0	19	---	740	1530	245	R 1	

↑ V_n Nominal volume [Litres]

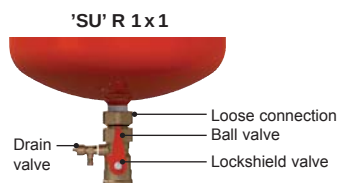
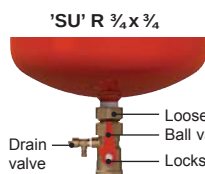
* = Quantity per pallet

5

reflex 'SU Lockshield valve'

- ▶ shut-off device for inspection and removal of expansion vessels
- ▶ including drain valve
- ▶ according to DIN EN 12828
- ▶ PN 10 / 120 °C

Type	Article-No.	Product group
SU R 3/4 x 3/4	7613000	84
SU R 1 x 1	7613100	84



reflex 'Digital pressure gauge'

- ▶ display range up to approximately 9 bar
- ▶ pressure indication in bar, kPa, psi

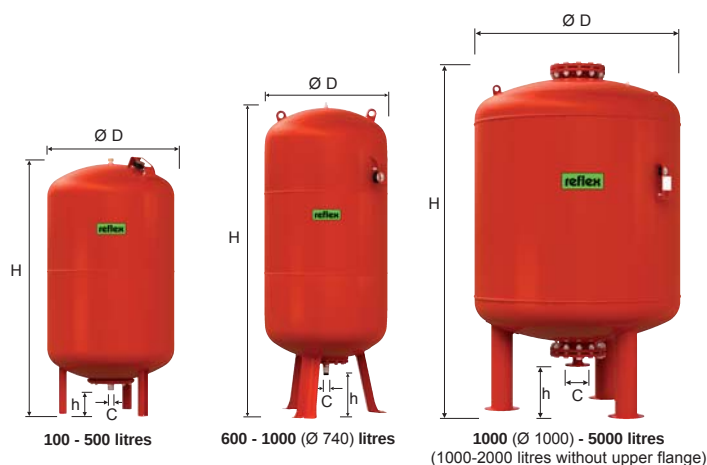
Article-No.	Product group
9119198	86



reflex

'reflex G'

- ▶ for heating and cooling water applications
- ▶ **replaceable** bladder, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ inspection opening
- ▶ factory-mounted pressure gauge
- ▶ colour: red, durable powder coating finish
- ▶ preset pressure 3.5 bar (Nitrogen)



Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
6 bar / 120 °C							
G 400	7521605	51.0	21	740	1253	146	G 1
G 500	7521705	59.0	21	740	1473	146	G 1
G 600	7522605	74.0	21	740	1718	146	G 1
G 800	7523610	102.0	21	740	2183	146	G 1
G 1000 Ø 740	7546605	158.0	21	740	2593	146	G 1
G 1000 Ø 1000	7524605	248.0	22	1000	1975	305	DN 65/PN 6
G 1500	7526605	297.0	22	1200	1975	305	DN 65/PN 6
G 2000	7527605	370.0	22	1200	2430	305	DN 65/PN 6
G 3000	7544605	640.0	22	1500	2480	335	DN 65/PN 6
G 4000	7529605	828.0	22	1500	3055	335	DN 65/PN 6
G 5000	7530605	905.0	22	1500	3590	335	DN 65/PN 6

10 bar / 120 °C							
G 100	7518000	16.5	21	480	856	152	G 1
G 200	7518100	36.5	21	634	972	144	G 1¼
G 300	7518200	41.6	21	634	1267	144	G 1¼
G 400	7521005	59.0	21	740	1245	133	G 1¼
G 500	7521006	65.1	21	740	1475	133	G 1¼
G 600	7522006	128.0	21	740	1859	263	G 1½
G 800	7523005	176.0	21	740	2324	263	G 1½
G 1000 Ø 740	7546005	214.0	21	740	2604	263	G 1½
G 1000 Ø 1000	7524005	355.0	22	1000	2000	290	DN 65/PN 16
G 1500	7526005	410.0	22	1200	2000	290	DN 65/PN 16
G 2000	7527005	505.0	22	1200	2450	290	DN 65/PN 16
G 3000	7544005	870.0	22	1500	2580	320	DN 65/PN 16
G 4000	7529005	1120.0	22	1500	3070	320	DN 65/PN 16
G 5000	7530005	1330.0	22	1500	3610	320	DN 65/PN 16

↑ V_n Nominal volume [Litres]

'reflex G' - Options upon request

- ▶ vessels > 5000 litres
- ▶ vessel operating pressure > 10 bar
- ▶ flanged connections: DN 150 as an option for G 1000 - 5000 Ø 1000
- ▶ **butyl** bladder according to German DIN norm

Certification TÜV

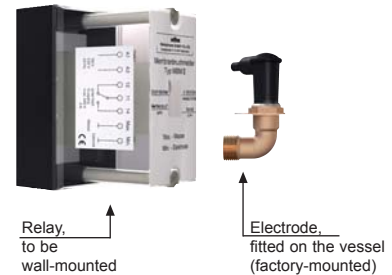
- ▶ 'reflex G' 80 - 5000 litres

Article-No.	Product group
7945610	95

reflex 'MBM II Diaphragm rupture detector'

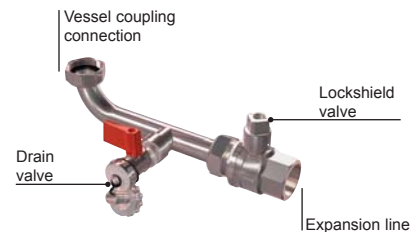
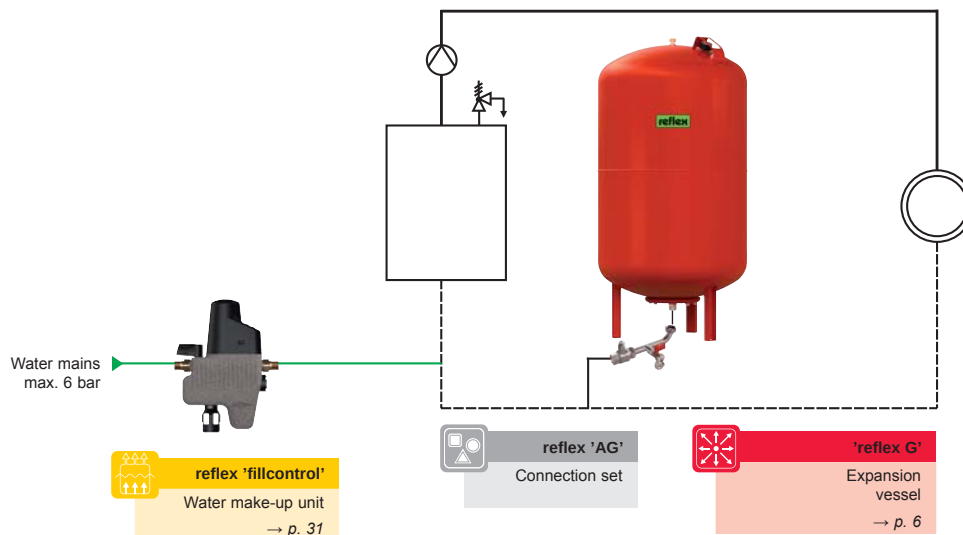
- ▶ for the signalling of diaphragm rupture in 'reflex G'
- ▶ consists of an electrode and electrode relay (factory-mounted)
- ▶ operates 230 V / 50 Hz supply
- ▶ three terminal dry contact
- ▶ recommended: 1 device for each vessel

Type	Article-No.	Product group
MBM II	7857700	86

**reflex 'AG Connection set'**

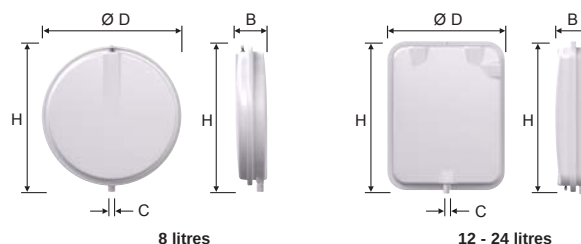
- ▶ for quick installation and easy inspection of vessel
- ▶ including lockshield valve
- ▶ G ½ drain valve with loose connection
- ▶ according to DIN EN 12828
- ▶ PN 16 / 120 °C

Type	Article-No.	Product group
1	9119204	80
1¼	9119205	80
1½	9119206	80

**Installation example****'reflex G' with reflex 'fillcontrol' - Pressurization and Water make-up**

'reflex F'

- ▶ flat vessel for heating (built-in boiler applications)
- ▶ non-replaceable diaphragm, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ from 18 litres with wall-hung clip
- ▶ meets or exceeds EC norms for pressure vessels 97/23/CE
- ▶ colour: white, stove enamelled finish

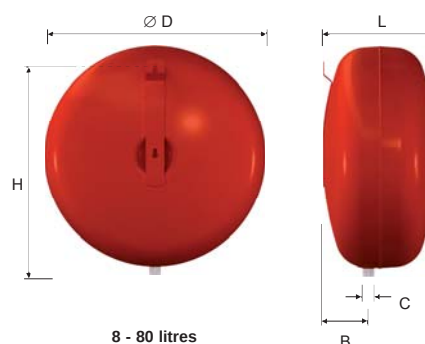


Type	Article-No.	Weight kg	Product group	Qpp*	H mm	Ø D mm	B mm	C	Pre-set pressure bar
3 bar / 120 °C									
F 8	9600011	6.5	15	54	389	389	88	G 3/8	0.75
F 12	9600030	8.5	15	36	444	350	108	G 1/2	1.0
F 15	9600040	9.0	15	36	444	350	134	G 3/4	
F 18	9600000	9.5	15	28	444	350	158	G 3/4	
F 24	9600010	9.8	15	25	444	350	180	G 3/4	

↑ V_n Nominal volume [Litres]

'reflex EN'

- ▶ for heating and cooling water applications
- ▶ suitable for anti-frost mixture up to 50%
- ▶ provided with suspension bracket for easy installation
- ▶ butyl bladder according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ meets or exceeds EC norms for pressure vessels 97/23/CE
- ▶ colour: red, durable powder coating finish



Type	Article-No.	Weight kg	Product group	Qpp*	Ø D mm	H mm	L mm	B mm	C	Pre-set pressure bar
3 bar / 120 °C										
EN 8	7280000	2.5	17	96	280	287	163	52	R 1/2	1.0
EN 12	7280100	4.0	17	60	354	361	168	64	R 1/2	
EN 18	7280200	4.6	17	48	354	367	222	76	R 3/4	
EN 25	7280300	5.8	17	42	409	419	239	93	R 3/4	
EN 35	7280400	7.3	17	24	480	457	240	97	R 3/4	1.5
EN 50	7280500	8.6	17	20	480	457	317	125	R 3/4	
EN 80	7280600	15.6	17	8	634	612	325	135	R 3/4	

↑ V_n Nominal volume [Litres]

* = Quantity per pallet

Bladder type expansion vessels

Potable water, water heating & hydro-pneumatic well applications

'reflex'

'reflex DE'

WRAS
APPROVED
PRODUCT

10 bar

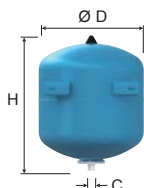
CE
ACS

- ▶ for potable water, water heating and hydro-pneumatic well applications
- ▶ bladder according to DIN 4807 norm part 3
- ▶ from 60 litres volume with **replaceable** bladder
- ▶ all vessel parts in contact with water are coated against corrosion
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ fitted with manometer from Ø 1000 mm
- ▶ colour: blue, durable powder coating finish
- ▶ preset pressure 4.0 bar (Nitrogen)

2 - 25 litres



33 litres
with wall-hung clip
(back view)



33 litres*



50 - 500 litres



600 -
1000 (Ø 740) litres



Type	Article-No.	Weight kg	Product group	Qpp**	Ø D mm	H mm	h mm	C
10 bar / 70 °C								
DE 2	7200300	1.0	40	100	132	260	---	G 3/4
DE 8	7301000	1.8	40	96	206	320	---	G 3/4
DE 12	7302000	2.4	40	72	280	310	---	G 3/4
DE 18	7303000	2.8	40	56	280	380	---	G 3/4
DE 25	7304000	3.7	40	42	280	500	---	G 3/4
DE 33	7303900	6.6	40	24	354	455	---	G 3/4
DE 33*	7305500	11.0	40	24	354	520	65	G 3/4
DE 50	7306005	9.5	42	---	409	605	101	G 1
DE 60	7306400	14	42	---	409	740	160	G 1
DE 80	7306500	16	42	---	480	730	150	G 1
DE 100	7306600	19	42	---	480	835	150	G 1
DE 200	7306700	47	42	---	634	970	145	G 1 1/4
DE 300	7306800	53	42	---	634	1270	145	G 1 1/4
DE 400	7306850	70	42	---	740	1245	135	G 1 1/4
DE 500	7306900	79	42	---	740	1475	135	G 1 1/4
DE 600	7306950	155	42	---	740	1860	265	G 1 1/2
DE 800	7306960	195	42	---	740	2325	265	G 1 1/2
DE 1000 Ø 740	7306970	228	42	---	740	2604	265	G 1 1/2
DE 1000 Ø 1000	7311405	418	44	---	1000	2010	290	DN 65 / PN 16
DE 1500	7311605	528	44	---	1200	2010	290	DN 65 / PN 16
DE 2000	7311705	703	44	---	1200	2470	290	DN 65 / PN 16
DE 3000	7311805	1043	44	---	1500	2520	320	DN 65 / PN 16
DE 4000	7354000	1120	44	---	1500	3095	320	DN 65 / PN 16
DE 5000	7354200	1330	44	---	1500	3630	320	DN 65 / PN 16

↑ V_n Nominal volume [Litres]

* = DE 33 litres with feet
** = Quantity per pallet

'reflex DE' - Options upon request

- ▶ vessels > 25 bar
- ▶ vessels > 5000 litres
- ▶ **butyl** bladder according to German KTW-C norm
- ▶ inner lining against corrosion according to German KTW-A (food quality regulation)
- ▶ stainless steel connection
- ▶ non-standard flanged connections
- ▶ 'MBM II Diaphragm rupture detector' → p.11
- ▶ German TÜV factory test certificate according to EC norms for pressure vessels → p.11



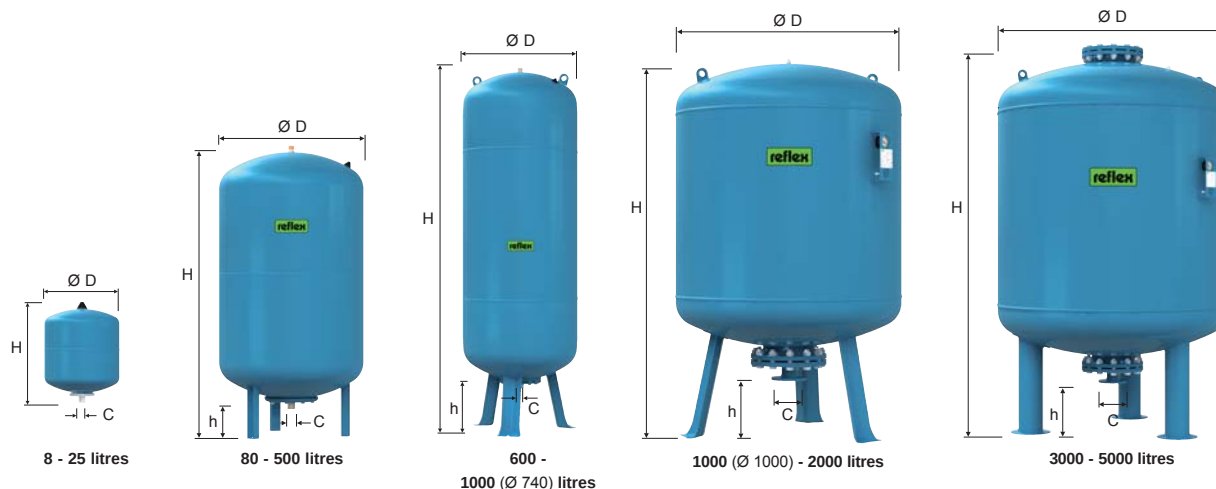
1000 (Ø 1000) -
2000 litres



3000 - 5000 litres

reflex

16 bar

WRAS
APPROVED
PRODUCTCE
ACS

Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
16 bar / 70 °C							
DE 8	7301006	2.0	40	206	320	---	G ¾
DE 12	7302105	2.8	40	280	310	---	G ¾
DE 25	7304015	4.2	40	280	500	---	G ¾
DE 80	7348600	24	42	480	730	150	G 1
DE 100	7348610	27	42	480	835	150	G 1
DE 200	7348620	54	42	634	970	145	G 1¼
DE 300	7348630	63	42	634	1270	145	G 1¼
DE 400	7348640	111	42	740	1395	265	G 1½
DE 500	7348650	123	42	740	1615	265	G 1½
DE 600	7348660	167	42	740	1860	265	G 1½
DE 800	7348670	217	42	740	2325	265	G 1½
DE 1000 Ø 740	7348680	252	42	740	2604	265	G 1½
DE 1000 Ø 1000	7312805	519	44	1000	2010	290	DN 65 / PN 16
DE 1500	7312905	674	44	1200	2030	290	DN 65 / PN 16
DE 2000	7313005	884	44	1200	2500	290	DN 65 / PN 16
DE 3000	7313105	1229	44	1500	2570	320	DN 65 / PN 16
DE 4000	7354100	1344	44	1500	3145	320	DN 65 / PN 16
DE 5000	7354300	1596	44	1500	3680	320	DN 65 / PN 16

↑ V_n Nominal volume [Litres]

'refix DE' - Options upon request

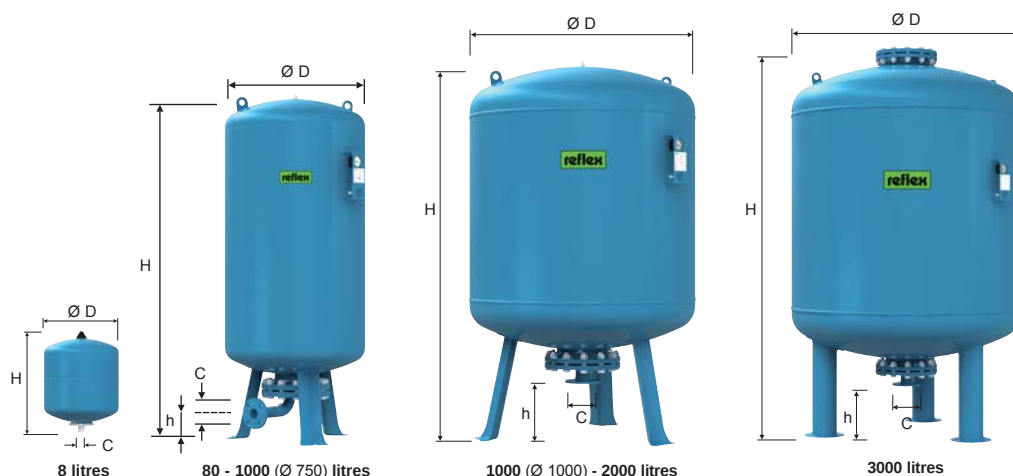
- ▶ vessels > 25 bar
- ▶ vessels > 5000 litres
- ▶ butyl bladder according to German KTW-C norm
- ▶ inner lining against corrosion according to German KTW-A (food quality regulation)
- ▶ stainless steel connection
- ▶ non-standard flanged connections
- ▶ 'MBM II Diaphragm rupture detector' → p. 11

Certification TÜV

- ▶ 'refix DE' 80 - 5000 litres

Article-No.	Product group
7945610	95

25 bar



Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
25 bar / 70 °C							
DE 8	7290100	3.5	40	206	320	---	G 3/4
DE 80	7317600	95	44	450	925	185	DN 50 / PN 40
DE 120	7313700	130	44	450	1235	185	DN 50 / PN 40
DE 180	7313500	167	44	450	1515	185	DN 50 / PN 40
DE 300	7313800	189	44	750	1275	200	DN 50 / PN 40
DE 400	7313300	290	44	750	1395	200	DN 50 / PN 40
DE 600	7321500	392	44	750	1860	185	DN 50 / PN 40
DE 800	7321200	466	44	750	2260	185	DN 50 / PN 40
DE 1000 Ø 750	7321000	547	44	750	2760	185	DN 50 / PN 40
DE 1000 Ø 1000	7322200	674	44	1000	1980	210	DN 65 / PN 40
DE 1500	7322100	876	44	1200	2050	285	DN 65 / PN 40
DE 2000	7313400	1149	44	1200	2500	285	DN 65 / PN 40
DE 3000	7345700	1597	44	1500	2520	315	DN 65 / PN 40

↑ V_n Nominal volume [Litres]

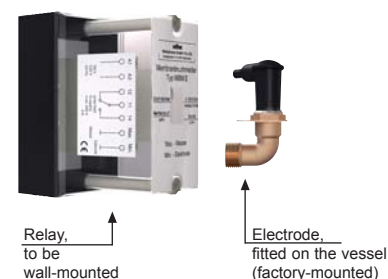
'reflex DE' - Options upon request

- ▶ vessels > 25 bar
- ▶ flanged connections: DN 65 and DN 80
- ▶ **butyl** bladder according to German KTW-C norm
- ▶ inner lining against corrosion according to German KTW-A (food quality regulation)
- ▶ German TÜV factory test certification

reflex 'MBM II Diaphragm rupture detector'

- ▶ for the signalling of diaphragm rupture in 'reflex DE' 60 ltr and above
- ▶ consists of an electrode and electrode relay (factory-mounted)
- ▶ operates 230 V / 50 Hz supply
- ▶ three terminal dry contact
- ▶ recommended: 1 device for each vessel

Type	Article-No.	Product group
MBM II	7857700	86

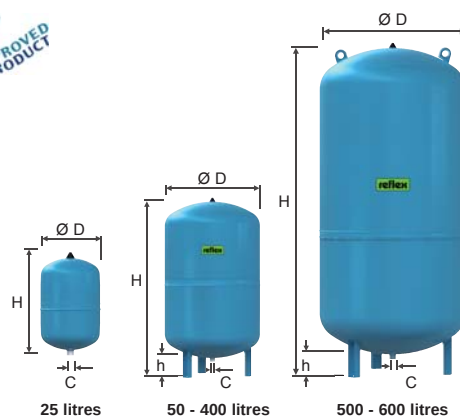


reflex

'refix DE junior'



- ▶ for potable water, fire fighting and hydro-pneumatic well applications
- ▶ non-replaceable diaphragm, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ all vessel parts in contact with water are coated against corrosion
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ colour: blue, durable powder coating finish



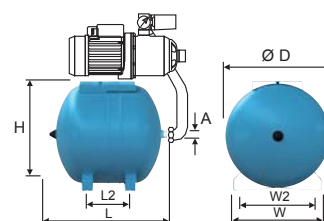
Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C	Pre-set pressure bar
10 bar / 70 °C								
DE junior 25	7200400	4.7	54	280	485	---	G 1	2.0
DE junior 50	7309600	13.2	54	409	605	115	R 1	4.0
DE junior 80	7309700	18.4	54	480	665	105	R 1	
DE junior 100	7309800	22.7	54	480	770	105	R 1	
DE junior 140	7309900	29.0	54	480	1015	105	R 1	
DE junior 200	7363500	40.0	54	634	885	90	R 1	
DE junior 300	7363600	54.0	54	634	1185	90	R 1	
DE junior 400	7363700	78.0	54	740	1175	80	R 1	
DE junior 500	7363800	80.0	54	740	1390	80	R 1	4.0
DE junior 600	7363900	103.0	54	740	1630	75	R 1	

↑ V_n Nominal volume [Litres]

'refix HW'



- ▶ for potable water, fire fighting and hydro-pneumatic well applications
- ▶ non-replaceable diaphragm, according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ all vessel parts in contact with water are coated against corrosion
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ colour: blue, durable powder coating finish
- ▶ preset pressure 2.0 bar (Nitrogen)



Type	Article-No.	Weight kg	Product group	Qpp*	Ø D mm	H mm	L mm	L2 mm	W2 mm	W mm	C
10 bar / 70 °C											
HW 25	7200200	5.5	49	36	280	294	484	228	214	270	G 1
HW 50	7308805	15.0	49	20	409	434	492	175	285	350	G 1
HW 80	7200260	18.0	49	---	480	504	562	193	285	350	G 1
HW 100	7200250	21.0	49	---	480	504	667	303	285	350	G 1

↑ V_n Nominal volume [Litres]

* = Quantity per pallet

reflex 'Water shock arrestor'



- ▶ to be used along devices where sudden pressure build-up is caused by quick shut-off such as washing machines, dish washers etc.
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ volume 165 cm³
- ▶ preset pressure 4 bar
- ▶ colour: blue, durable powder coating finish

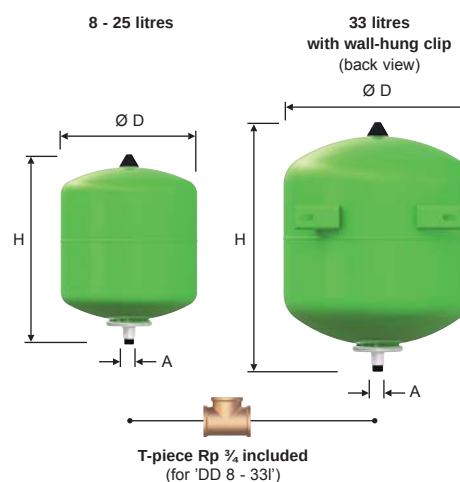


Article-No.	Product group
7351000	74

10 bar / 70 °C

'refix DD'

- ▶ for potable water applications according to DIN/DVGW 4807 norm part 5
- ▶ integrated internal circulation / anti-legionella
- ▶ **butyl** bladder according to German KTW-C norm
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ green or white inner and outer anti-corrosion coating according to German KTW-A (food quality regulation)
- ▶ preset pressure 4.0 bar (Nitrogen)
- ▶ can be installed with 'flowjet' - flow through valve



Type	Article-No.	Weight	Product	Qpp*	Ø D	H	C
10 bar / 70 °C	green	white	kg	group	mm	mm	
DD 8	7308000	7307700	1.9	48	96	206	G 3/4
DD 12	7308200	7307800	2.3	48	72	280	G 3/4
DD 18	7308300	7307900	2.8	48	56	280	G 3/4
DD 25	7308400	7380400	3.7	48	42	280	G 3/4
DD 33	7380700	7380800	6.6	48	24	354	G 3/4

25 bar / 70 °C	Article-No.	Weight	Product	Qpp*	Ø D	H	C
DD 8	7290200	7290300	9.0	48	---	206	G 3/4

↑ V_n Nominal volume [Litres]

* = Quantity per carton

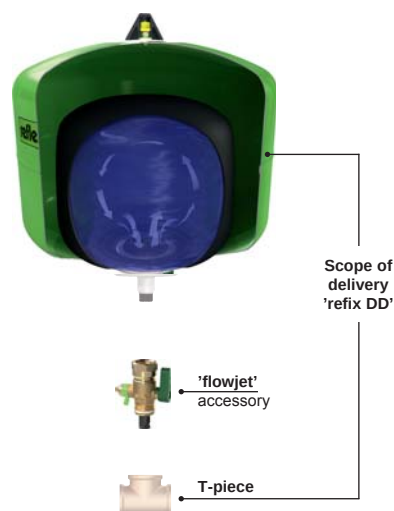
'refix' - Accessories

'flowjet' - Flow through, shut-off and discharge valve

- ▶ for easy assembly and maintenance of 'refix DD' pressure tanks according to DIN/DVGW 4807 norm part 5
- ▶ max. operating pressure 16 bar
- ▶ max. operating temperature 70 °C
- ▶ connectable to T-piece Rp 3/4 (included in 'refix DD' delivery)

Type	Article-No.	Product**	Qpc*
		group	
flowjet 3/4	9116799	85	5

** delivery in package containing 5 pieces



reflex 'Wall hung holder' for vessels 8 - 25 litres

- ▶ bracket with tightening strap for vertical mounting

Type	Article-No.	Product	Qpc*
		group	
8 - 25 l	7611000	75	36

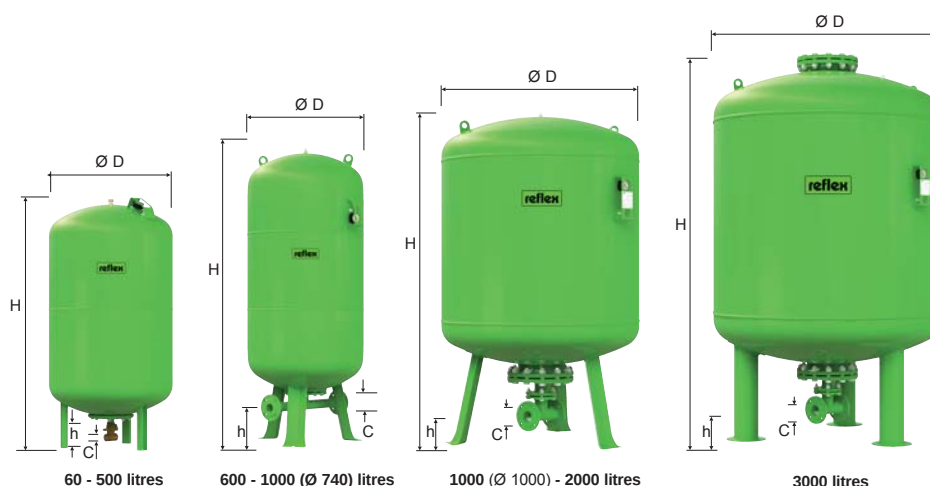


'refix DT5'

10 bar



- ▶ for potable water applications according to DIN/DVGW 4807 norm part 5
- ▶ integrated internal circulation / anti-legionella
- ▶ in case of Rp 1 1/4 connection (60 - 500 litres) factory-equipped with 'flowjet': flow-through, shut-off and discharge valve
- ▶ **replaceable butyl** bladder according to German KTW-C norm
- ▶ green inner and outer anti-corrosion coating according to German KTW-A (food quality regulation)
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ preset pressure 4.0 bar (Nitrogen)



Type	C	Article-No.	Weight	Product	Ø D	H	h
10 bar / 70 °C							
DT5 60	'flowjet' Rp 1 1/4	7309000	15	47	409	766	80
DT5 80	'flowjet' Rp 1 1/4	7309100	17	47	480	750	65
	DN 50 / PN 16	7365000	23	47	480	750	100
	DN 65 / PN 16	7335705	24	47	480	750	110
	DN 80 / PN 16	7335805	26	47	480	750	115
DT5 100	'flowjet' Rp 1 1/4	7309200	20	47	480	835	65
	DN 50 / PN 16	7365400	26	47	480	835	100
	DN 65 / PN 16	7365405	27	47	480	835	110
	DN 80 / PN 16	7365406	29	47	480	835	115
DT5 200	'flowjet' Rp 1 1/4	7309300	47	47	634	975	80
	DN 50 / PN 16	7365100	53	47	634	975	105
	DN 65 / PN 16	7365105	54	47	634	975	115
	DN 80 / PN 16	7365106	57	47	634	975	120
DT5 300	'flowjet' Rp 1 1/4	7309400	53	47	634	1275	80
	DN 50 / PN 16	7365200	59	47	634	1275	105
	DN 65 / PN 16	7336305	60	47	634	1275	115
	DN 80 / PN 16	7336405	63	47	634	1275	120
DT5 400	'flowjet' Rp 1 1/4	7319305	73	47	740	1245	70
	DN 50 / PN 16	7365500	79	47	740	1245	95
	DN 65 / PN 16	7336505	80	47	740	1245	105
	DN 80 / PN 16	7336605	83	47	740	1245	110
DT5 500	'flowjet' Rp 1 1/4	7309500	79	47	740	1475	70
	DN 50 / PN 16	7365300	85	47	740	1475	90
	DN 65 / PN 16	7365307	86	47	740	1475	100
	DN 80 / PN 16	7365305	89	47	740	1475	110

V_n Nominal volume [Litres]

Type 10 bar / 70 °C	C	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm
DT5 600	DN 50 / PN 16	7365600	164	47	740	1860	235
	DN 65 / PN 16	7336705	165	47	740	1860	235
	DN 80 / PN 16	7336806	168	47	740	1860	235
DT5 800	DN 50 / PN 16	7365700	204	47	740	2325	235
	DN 65 / PN 16	7336905	205	47	740	2325	235
	DN 80 / PN 16	7337006	208	47	740	2325	235
DT5 1000 Ø 740	DN 50 / PN 16	7365800	244	47	740	2604	235
	DN 65 / PN 16	7337105	245	47	740	2604	235
	DN 80 / PN 16	7337205	248	47	740	2604	235
DT5 1000 Ø 1000	DN 65 / PN 16	7320105	424	46	1000	2000	160
	DN 80 / PN 16	7337305	426	46	1000	2000	150
	DN 100 / PN 16	7337405	428	46	1000	2000	140
DT5 1500	DN 65 / PN 16	7320305	539	46	1200	2000	160
	DN 80 / PN 16	7337505	541	46	1200	2000	150
	DN 100 / PN 16	7337605	543	46	1200	2000	140
DT5 2000	DN 65 / PN 16	7320505	714	46	1200	2450	160
	DN 80 / PN 16	7337705	716	46	1200	2450	150
	DN 100 / PN 16	7337805	718	46	1200	2450	140
DT5 3000	DN 65 / PN 16	7320705	1054	46	1500	2520	190
	DN 80 / PN 16	7337905	1056	46	1500	2520	180
	DN 100 / PN 16	7338005	1058	46	1500	2520	170

↑ V_n Nominal volume [Litres]

'reflex DT5' - Options upon request

- ▶ vessels > 16 bar
- ▶ stainless steel connections

reflex 'MBM II Diaphragm rupture detector'

- ▶ for the signalling of diaphragm rupture in 'reflex DT5'
- ▶ consists of an electrode and electrode relay (factory-mounted)
- ▶ operates 230 V / 50 Hz supply
- ▶ three terminal dry contact
- ▶ recommended: 1 device for each vessel

Type	Article-No.	Product group
MBM II	7857700	86



Relay,
to be
wall-mounted



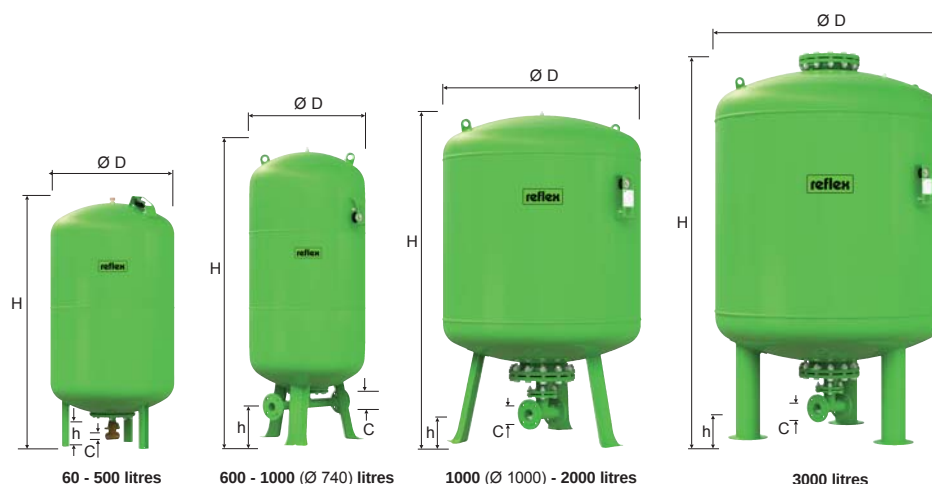
Electrode,
fitted on the vessel
(factory-mounted)

Certification TÜV

- ▶ 'reflex DT5'

Article-No.	Product group
7945610	95

16 bar



16

Type	C	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm
16 bar / 70 °C							
DT5 80	'flowjet' Rp 1 1/4	7316005	27	47	480	750	65
	DN 50 / PN 16	7370000	32	47	480	750	100
	DN 65 / PN 16	7310306	33	47	480	750	110
	DN 80 / PN 16	7310307	35	47	480	750	115
DT5 100	'flowjet' Rp 1 1/4	7365408	29	47	480	835	65
	DN 50 / PN 16	7370100	34	47	480	835	100
	DN 65 / PN 16	7370101	35	47	480	835	110
	DN 80 / PN 16	7370102	37	47	480	835	115
DT5 200	'flowjet' Rp 1 1/4	7365108	55	47	634	975	80
	DN 50 / PN 16	7370200	61	47	634	975	105
	DN 65 / PN 16	7370205	62	47	634	975	115
	DN 80 / PN 16	7370206	65	47	634	975	120
DT5 300	'flowjet' Rp 1 1/4	7319205	64	47	634	1275	80
	DN 50 / PN 16	7370300	70	47	634	1275	105
	DN 65 / PN 16	7314205	71	47	634	1275	115
	DN 80 / PN 16	7314206	74	47	634	1275	120
DT5 400	DN 50 / PN 16	7370400	118	47	740	1395	235
	DN 65 / PN 16	7339006	119	47	740	1395	235
	DN 80 / PN 16	7339005	122	47	740	1395	235
DT5 500	DN 50 / PN 16	7370500	130	47	740	1620	235
	DN 65 / PN 16	7370507	131	47	740	1620	235
	DN 80 / PN 16	7370505	134	47	740	1620	235
DT5 600	DN 50 / PN 16	7370600	174	47	740	1860	235
	DN 65 / PN 16	7339105	175	47	740	1860	235
	DN 80 / PN 16	7339205	178	47	740	1860	235
DT5 800	DN 50 / PN 16	7370700	224	47	740	2325	235
	DN 65 / PN 16	7339305	225	47	740	2325	235
	DN 80 / PN 16	7339406	228	47	740	2325	235
DT5 1000 Ø 740	DN 50 / PN 16	7370800	259	47	740	2604	235
	DN 65 / PN 16	7339505	260	47	740	2604	235
	DN 80 / PN 16	7339605	263	47	740	2604	235

V_n Nominal volume [Litres]

Type	C	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm
16 bar / 70 °C							
DT5 1000 Ø 1000	DN 65 / PN 16	7320205	530	46	1000	2000	160
	DN 80 / PN 16	7339705	533	46	1000	2000	150
	DN 100 / PN 16	7339805	536	46	1000	2000	140
DT5 1500	DN 65 / PN 16	7320405	685	46	1200	2000	160
	DN 80 / PN 16	7339905	688	46	1200	2000	150
	DN 100 / PN 16	7340005	691	46	1200	2000	140
DT5 2000	DN 65 / PN 16	7320605	895	46	1200	2450	160
	DN 80 / PN 16	7340105	898	46	1200	2450	150
	DN 100 / PN 16	7340205	901	46	1200	2450	140
DT5 3000	DN 65 / PN 16	7320805	1240	46	1500	2520	190
	DN 80 / PN 16	7340305	1243	46	1500	2520	180
	DN 100 / PN 16	7340405	1246	46	1500	2520	170

↑ V_n Nominal volume [Litres]

'reflex DT5' - Options upon request

- ▶ vessels > 16 bar
- ▶ stainless steel connections

reflex 'MBM II Diaphragm rupture detector'

- ▶ for the signalling of diaphragm rupture in 'reflex DT5'
- ▶ consists of an electrode and electrode relay (factory-mounted)
- ▶ operates 230 V / 50 Hz supply
- ▶ three terminal dry contact
- ▶ recommended: 1 device for each vessel

Type	Article-No.	Product group
MBM II	7857700	86



Relay,
to be
wall-mounted



Electrode,
fitted on the vessel
(factory-mounted)

Certification TÜV

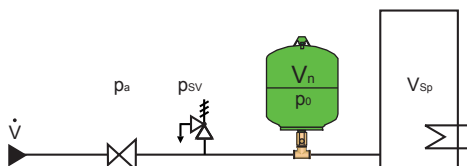
- ▶ 'reflex DT5'

Article-No.	Product group
7945610	95

Selection of the nominal vessel volume V_n

10 °C Cold water inlet temperature

60 °C Storage temperature



- Preset press. gas $p_0 = 3.0 \text{ bar}$
- Set press. of the pressure reducer $p_a \geq 3.2 \text{ bar}$

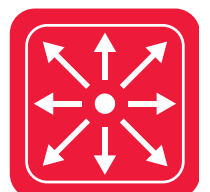
p_{sv} / bar	6	8	10
$V_{sp} [\text{litres}]$	Nominal volume 'reflex' [litres]		
90	8	8	8
100	8	8	8
120	8	8	8
130	8	8	8
150	8	8	8
180	12	8	8
200	12	8	8
250	12	12	8
300	18	12	12
400	25	18	18
500	25	18	18
600	33	25	18
700	33	25	25
800	60	33	25
900	60	33	25
1000	60	33	33
1500	80	60	60
2000	100	80	80
3000	200	100	100

- Preset press. gas $p_0 = 4.0 \text{ bar} = \text{factory setting}$
- Set press. of the pressure reducer $p_a \geq 4.2 \text{ bar}$

p_{sv} / bar	6	8	10
$V_{sp} [\text{litres}]$	Nominal volume 'reflex' [litres]		
90	8	8	8
100	12	8	8
120	12	8	8
130	12	8	8
150	18	8	8
180	18	8	8
200	18	12	8
250	25	12	12
300	25	18	12
400	33	18	18
500	60	25	18
600	60	33	25
700	60	33	25
800	80	60	25
900	80	60	33
1000	100	60	60
1500	200	80	60
2000	200	100	80
3000	300	200	100



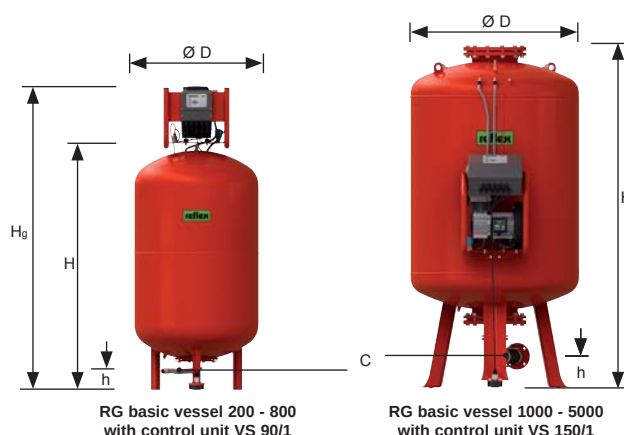
Detailed information on calculation can be taken from our brochure "Pressurization, deaeration, water make-up, and heat transfer systems" and also online and for download from our sizing software 'reflex pro' at www.reflex.de - or try our brand new 'reflex pro app'!



reflex 'reflexomat'



- compressor-controlled pressurization system for heating and cooling systems up to 120 °C max. flow temperature
- maintains the pressure level within +/- 0.1 bar boundary
- meets or exceeds EC norms for pressure vessels 97/23/EC
- superior quality **butyl** bladder according to German DIN 4807 norm part 3, max. operating temperature 70 °C
- microprocessor control with display in 8 languages
- permanent display of system pressure and tank volume level
- 230 V output for fully automated water make-up
- 2 dry contacts
(common fault, min. water level)
- data output through RS-485 (from VS 90/2 and VS 150)



VS control unit with 1 compressor

	Type	Article-No.	Weight kg	Product group	H / L / G mm	
up to 800 l / 6 bar VS on the RG basic vessel	VS 90/1*	7880100	21	33	415 / 395 / 520	Compressor on the VS
	VS 150/1	7880200	28	33	415 / 395 / 520	
	VS 300/1	7880300	34	33	415 / 395 / 520	Compressor alongside
	VS 400/1	7880400	51	33	415 / 395 / 520	
	VS 580/1	7880500	102	33	415 / 395 / 520	
350, 500 750 l / 10 bar and from 1000 l VS in front of the RG basic vessel	VS 90/1*	7880600	25	33	585 / 395 / 345	Compressor on the VS
	VS 150/1	7880700	32	33	585 / 395 / 345	
	VS 300/1	7880800	38	33	585 / 395 / 345	Compressor alongside
	VS 400/1	7880900	55	33	585 / 395 / 345	
	VS 580/1	7881200	106	33	585 / 395 / 345	

* - VS 90/1: Voltage 230 V / 50 Hz; from VS 150: 400 V / 50 Hz
 - 1 dry contact (common fault)
 - no connection for 'RE Extension module'

VS control unit with 2 compressors

	Type	Article-No.	Weight kg	Product group	H / L / G mm	
up to 800 l / 6 bar VS on the RG basic vessel	VS 90/2**	7882100	33	33	415 / 395 / 520	1 Compressor on the VS
	VS 150/2	7883100	45	33	415 / 395 / 520	1 Compressor alongside
	VS 300/2	7884100	61	33	415 / 395 / 520	2 Compressors alongside
	VS 400/2	7885100	95	33	415 / 395 / 520	
	VS 580/2	7886100	197	33	415 / 395 / 520	
350, 500 750 l / 10 bar and from 1000 l VS in front of the RG basic vessel	VS 90/2**	7886200	37	33	585 / 395 / 345	1 Compressor on the VS
	VS 150/2	7886300	49	33	585 / 395 / 345	1 Compressor alongside
	VS 300/2	7886400	65	33	585 / 395 / 345	2 Compressors alongside
	VS 400/2	7886500	99	33	585 / 395 / 345	
	VS 580/2	7886600	201	33	585 / 395 / 345	

** VS 90/2: 230 V / 50 Hz; from VS 150: 400 V / 50 Hz

- Operation of more than 2 compressors and tailor-made control panels upon request

Control unit without compressor (for on-site air circuits)

	Type	Article-No.	Weight kg	Product group	H / L / G mm	
up to 800 l from 1000 l	VS 90/1*	7881100	9	33	415 / 395 / 520	without compressor
	VS 90/1*	7881105		33	585 / 395 / 345	

* Voltage 230 V / 50 Hz

- **additional price** for solenoid valve for the feed of oil-free, compressed air
(fitted ready for connection in the VS 90/1 control unit without compressor)

Butyl
bladder

RG Basic vessel

Type	6 bar		10 bar		Product group	Ø D mm	H mm	H _g mm	h mm	C
	Article-No.	Weight kg	Article-No.	Weight kg						
RG 200	7799100	37	---	---	30	634	970	1350	115	R 1
RG 300	7799200	54	---	---	30	634	1270	1650	115	R 1
RG 400	7799300	65	---	---	30	740	1255	1640	100	R 1
RG 500	7799400	78	---	---	30	740	1475	1860	100	R 1
RG 600	7799500	94	---	---	30	740	1720	2110	100	R 1
RG 800	7799600	149	---	---	30	740	2185	2570	100	R 1
RG 350	---	---	7654000	230	30	750	1320	---	200	DN 40
RG 500	---	---	7654100	275	30	750	1740	---	200	DN 40
RG 750	---	---	7654200	345	30	750	2185	---	200	DN 50
RG 1000	7650105	330	7651005	580	32	1000	2025	---	195	DN 65
RG 1500	7650305	465	7651205	800	32	1200	2025	---	185	DN 65
RG 2000	7650405	656	7651305	960	32	1200	2480	---	185	DN 65
RG 3000	7650605	795	7651505	1425	32	1500	2480	---	220	DN 65
RG 4000	7650705	1080	7651605	1950	32	1500	3065	---	220	DN 65
RG 5000	7650805	1115	7651705	2035	32	1500	3590	---	220	DN 65

- ▶ flanged connections: PN 6 at 6 bar, PN 16 at 10 bar
- ▶ for RG 800: one could choose to fix control unit on top of the tank (check total height) or use wall bracket → see below

'reflexomat' Total price

=

VS Control unit

RG Basic vessel

+

'reflexomat' Options

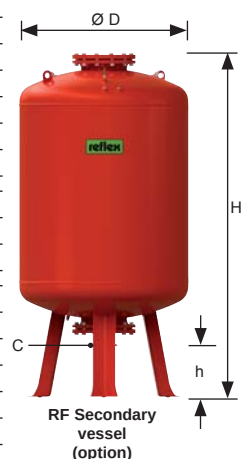
reflex 'reflexomat' - Options

21

Butyl
bladder

RF Secondary vessel

Type	6 bar		10 bar		Product group	Ø D mm	H mm	h mm	C
	Article-No.	Weight kg	Article-No.	Weight kg					
RF 200	7789100	37	---	---	30	634	970	155	R 1
RF 300	7789200	54	---	---	30	634	1270	155	R 1
RF 400	7789300	65	---	---	30	740	1255	140	R 1
RF 500	7789400	78	---	---	30	740	1475	140	R 1
RF 600	7789500	94	---	---	30	740	1720	140	R 1
RF 800	7789600	149	---	---	30	740	2185	140	R 1
RF 350	---	---	7654300	230	30	750	1320	200	DN 40
RF 500	---	---	7654400	275	30	750	1740	200	DN 40
RF 750	---	---	7654500	345	30	750	2185	200	DN 40
RF 1000	7652005	330	7653005	580	32	1000	2025	305	DN 65
RF 1500	7652205	465	7653205	800	32	1200	2025	305	DN 65
RF 2000	7652305	656	7653305	960	32	1200	2480	305	DN 65
RF 3000	7652505	795	7653505	1425	32	1500	2480	334	DN 65
RF 4000	7652605	1080	7653605	1950	32	1500	3065	334	DN 65
RF 5000	7652705	1115	7653705	2035	32	1500	3590	334	DN 65



- ▶ flanged connections: PN 6 at 6 bar, PN 16 at 10 bar
- ▶ easy installation of RF 200 - 800/6 bar with reflex 'AG Connection set' → p. 7

reflex 'Wall bracket'

- ▶ for user-friendly installation of the VS 90 and VS 150 control units with RG 800 basic vessels (check overall height H/H_g)
- ▶ including 3 m long connecting hoses

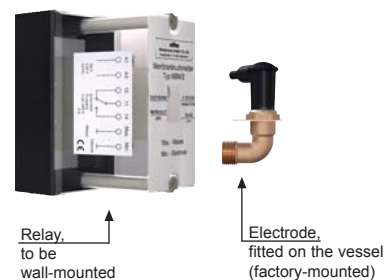
Article-No.	Product group
7881900	35



reflex 'MBM II Diaphragm rupture detector'

- ▶ for the signalling of diaphragm rupture in 'reflexomat' basic and secondary vessels
- ▶ consists of an electrode and electrode relay (factory-mounted)
- ▶ operates 230 V / 50 Hz supply
- ▶ three terminal dry contact
- ▶ recommended: 1 device for each vessel

Type	Article-No.	Product group
MBM II	7857700	86



reflex 'Master-Slave control module'

for VS 90/1 only if combined with option RS485

- ▶ for the optimized operation of up to 10 'reflexomat' units in hydraulic interconnection at a distance of 1000 m and more (requires one module for each control unit)

Article-No.	Product group
7859000	35

reflex 'RE Extension module' (from VS 90/2)

- ▶ analog output 0–10 V/4 - 20 mA for pressure and level indication at distance, with 6 digital inputs and 6 floating outputs
- ▶ for wall mounting including earthing type plug (230 V / 50 Hz)

Article-No.	Product group
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Standard parameters: according to instruction manual

7858405	35
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Special parameters: upon request



reflex 'RK Communication module' (from VS 90/2 and VS 150/1)

- ▶ for the external operation of the control unit through a twin-core cable up to 1000 m range

Article-No.	Product group
7951200	35



reflex 'Bus module' (from VS 90/2 and VS 150/1)

- ▶ for exchange of data between the Reflex control unit and the building central control technology (BMS)

Type	Article-No.	Product group
'Lon Works' Digital	7860000	86
'Lon Works'	7860100	86
'Profibus-DP'	7860200	86
'Ethernet'	7860300	86



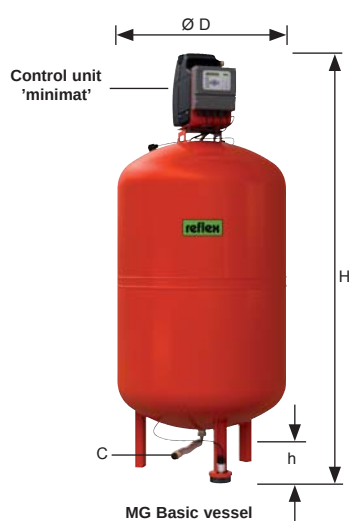
RS-485 Interface for VS 90/1 control unit

- ▶ for the connection of Reflex electronic modules like Master-Slave, Bus module, etc. incl. 2 dry contacts

	Article-No.	Product group
for RG 200-800 l / 6 bar	7997710	33
for RG 350 l and above	7997720	33

reflex 'minimat'

- ▶ compressor-controlled pressurization unit for heating and cooling systems up to 120 °C max. flow temperature
- ▶ compact design
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ **butyl** diaphragm according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ microprocessor control unit with graphic display
- ▶ indication of system pressure and tank volume level
- ▶ maintains the pressure level within +/- 0.1 bar boundary
- ▶ 230 V output for fully automated water make-up
- ▶ 1 dry contact (common fault)



Butyl
diaphragm

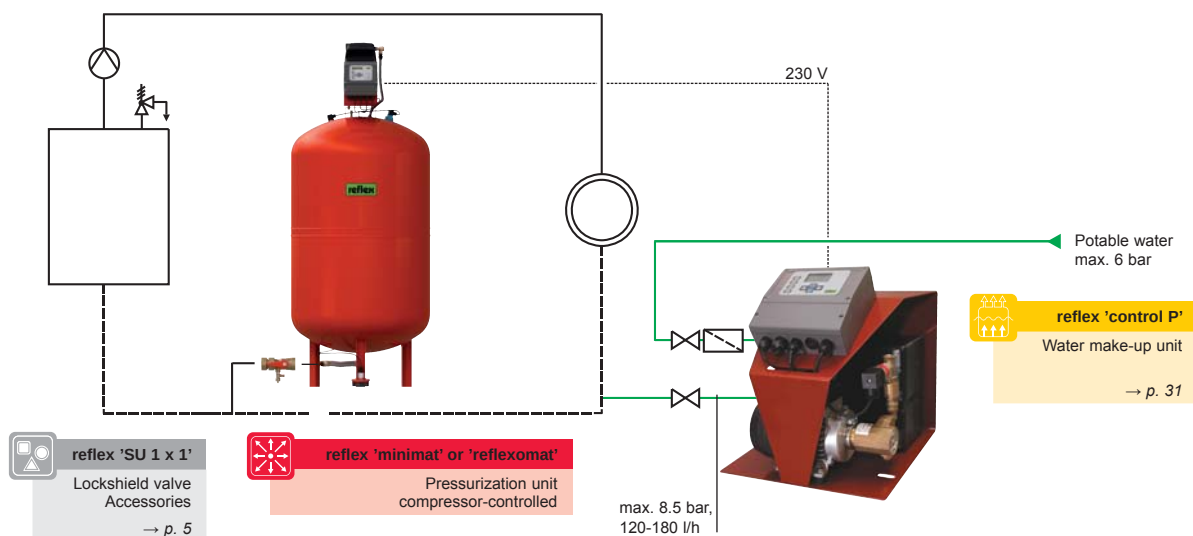
MG Compact unit

Type	Article-No.	Weight	Product	Ø D	H	h	C
6 bar / 120 °C							
MG 200	7806405	52	31	634	1320	135	R 1
MG 300	7801705	69	31	634	1620	135	R 1
MG 400	7802805	80	31	740	1620	135	R 1
MG 500	7803705	93	31	740	1845	135	R 1

↑ V_n Nominal volume [Litres]

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Installation example 'minimat' or 'reflexomat' with water make-up



reflex 'variomat'

- ▶ pump-controlled pressurization system with integrated water make-up and deaeration for heating and cooling systems
- ▶ expansion water is collected inside the bladder i.e. protected against direct air ingress
- ▶ replaceable **butyl** bladder according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ microprocessor control with display in 8 languages
- ▶ permanent display of system pressure and tank volume level
- ▶ 2 dry contacts (common fault, min. water level, except 'variomat 1')
- ▶ data output through RS-485 (from 'variomat' type 2-1 and 2-2)
- ▶ patented, fully automated actuator valve operation
- ▶ easy to commission



Control unit with 1 pump



2-1 types with soft-start pump

Type	Article-No.	Weight kg	Product group	Voltage V	p ₀ bar	H / W / D mm	C
10 bar							
1*	6910100	25	38	230/50 Hz	≤ 2,5	680/530/580	
10 bar							
2-1/60	6910200	28	38	230/50 Hz	≤ 4,8	680/530/670	2 x Rp 1 water make-up Rp 1/2
2-1/75	6910500	35	38	230/50 Hz	≤ 6,5	770/530/630	
2-1/95	6910600	37	38	230/50 Hz	≤ 8,0	770/530/540	
16 bar							
1-1/140	6910700	57	38	400/50 Hz	≤ 13,0	770/530/540	

* 1 dry contact (common fault)

p₀ = Input value on control panel
= Static height + vaporization pressure
+ 0.2 bar (recommended)

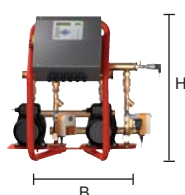
Connection set G1

- ▶ to connect the 1-pump control unit to the VG basic vessel



VG Basic vessel Ø mm	Article-No.	Product group
634 - 740	6940100	39
1000 - 1500	6940200	39

Control unit with 2 pumps



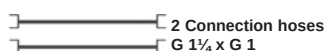
2-2 types with soft-start pump

Type	Article-No.	Weight kg	Product group	Voltage V	p ₀ bar	H / W / D mm	C
10 bar							
2-2/35	6911100	54	38	230/50 Hz	≤ 2,5	680/700/780	2 x G1 1/4 water make-up Rp 1/2
2-2/60	6911200	58	38	230/50 Hz	≤ 4,8	680/700/780	
2-2/75	6911500	72	38	230/50 Hz	≤ 6,5	770/700/730	
2-2/95	6911600	76	38	230/50 Hz	≤ 8,0	770/700/730	
16 bar							
1-2/140	6912700	96	38	400 /50 Hz	≤ 13,0	760/700/730	

p₀ = Input value on control panel
= Static height + vaporization pressure
+ 0.2 bar (recommended)

Connection set G 1 1/4

- ▶ to connect the 2-pump control unit to the VG basic vessel



VG Basic vessel Ø mm	Article-No.	Product group
634 - 740	6940300	39
1000 - 1500	6940400	39

Pressurization unit pump-controlled

reflex 'variomat'

VG Basic vessel

Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
VG 200	6600000	37	36	634	1060	146	G 1
VG 300	6600100	54	36	634	1360	146	G 1
VG 400	6600200	65	36	740	1345	133	G 1
VG 500	6600300	78	36	740	1560	133	G 1
VG 600	6600400	94	36	740	1810	133	G 1
VG 800	6600500	149	36	740	2275	133	G 1
VG 1000 Ø 740	6600600	156	36	740	2685	133	G 1
VG 1000 Ø 1000	6600705	320	37	1000	2130	350	G 1
VG 1500	6600905	465	37	1200	2130	350	G 1
VG 2000	6601005	565	37	1200	2590	350	G 1
VG 3000	6601205	795	37	1500	2590	380	G 1
VG 4000	6601305	1080	37	1500	3160	380	G 1
VG 5000	6601405	1115	37	1500	3695	380	G 1

↑ V_n Nominal volume [Litres]

► VG Basic vessel > 5000 litres upon request



VG Basic vessel

'variomat' Total price

=

Control unit

Connection set

VG Basic vessel

+

'variomat' Options

reflex 'variomat' - Options

VF Secondary vessel

Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
VF 200	6610000	37	36	634	1060	130	G 1
VF 300	6610100	54	36	634	1360	130	G 1
VF 400	6610200	65	36	740	1345	115	G 1
VF 500	6610300	78	36	740	1560	115	G 1
VF 600	6610400	94	36	740	1810	115	G 1
VF 800	6610500	149	36	740	2275	115	G 1
VF 1000 Ø 740	6610600	156	36	740	2685	115	G 1
VF 1000 Ø 1000	6610705	320	37	1000	2130	350	G 1
VF 1500	6610905	465	37	1200	2130	350	G 1
VF 2000	6611005	565	37	1200	2590	350	G 1
VF 3000	6611205	795	37	1500	2590	380	G 1
VF 4000	6611305	1080	37	1500	3160	380	G 1
VF 5000	6611405	1115	37	1500	3695	380	G 1

↑ V_n Nominal volume [Litres]

► VF Secondary vessel > 5000 litres upon request



VF Secondary vessel (option)

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'VW variomat' - Thermal insulation for VG basic vessels

- for thermal insulation of VG primary vessels
- 50 mm soft foam insulation with zip fastening and bottom insulation

Type	Article-No.	Product group
VW 200	7985700	39
VW 300	7986000	39
VW 400	7995600	39
VW 500	7983900	39
VW 600	7995700	39
VW 800	7993800	39
VW 1000 Ø 740	7993900	39
VW 1000 Ø 1000	7986800	39
VW 1500	7987000	39
VW 2000	7987100	39
VW 3000	7993200	39
VW 4000	7993300	39
VW 5000	7993400	39

↑ V_n Nominal volume [Litres]



VW Thermal insulation (option)



reflex 'variomat' Options

reflex 'VE Extension module' (from 'variomat' type 2-1 and 2-2)

- ▶ analog output 0–10 V/4 - 20 mA for pressure and level indication at distance, with 6 digital inputs and 6 floating outputs
- ▶ for wall mounting including earthing type plug (230 V / 50 Hz)

Article-No.	Product group
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Standard parameters: according to instruction manual

7997705	39
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Special parameters: upon request



reflex 'VK Communication module' (from 'variomat' type 2-1 and 2-2)

- ▶ for the external operation of the control unit through a twin-core cable up to 1000 m range

Article-No.	Product group
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7997800	39
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reflex 'Bus module' (from 'variomat' type 2-1 and 2-2)

- ▶ for exchange of data between the Reflex control unit and the building central control technology (BMS)

Type	Article-No.	Product group
'Lon Works' Digital	7860000	86
'Lon Works'	7860100	86
'Profibus-DP'	7860200	86
'Ethernet'	7860300	86



reflex 'SU Lockshield valve'

- ▶ lockshield valve for VF secondary vessels
- ▶ PN 10 / 120 °C

Type	Article-No.	Product group
SU R 1 x 1	7613100	84



vessel coupling connection

reflex 'fillset'

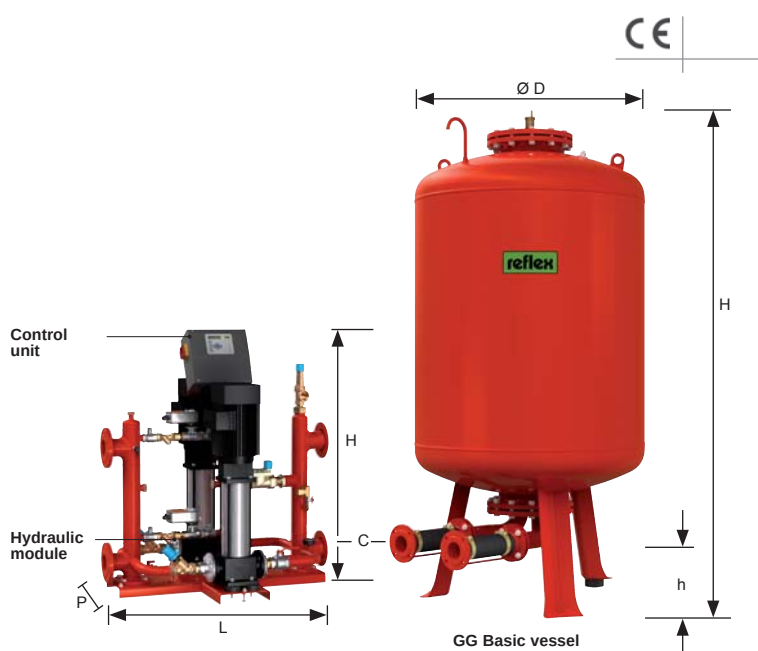
- ▶ pre-fabricated assembly for direct connection of HVAC systems to water mains
- ▶ total quantity of make-up water is measured by a water meter
- ▶ prevents backflow of HVAC water into the water mains
- ▶ with German DVGW-approved BA-type backflow preventer
- ▶ including wall bracket and isolation valves



	Article-No.	Weight kg	Product group	Length mm	C
10 bar / 60 °C	with standard water meter				
	6811105	1.7	70	293	R ½, R ½
10 bar / 60 °C	with contact water meter (not for 'variomat 1')				
	6811205	1.7	70	293	R ½, R ½

reflex 'gigamat'

- ▶ pump-controlled pressurization system with integrated water make-up for heating and cooling systems
- ▶ with 2 pumps and 2 modulating excess pressure valves
- ▶ max. operating pressure 16 bar
- ▶ **replaceable butyl** bladder according to DIN 4807 norm part 3, max. operating temperature 70 °C
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ microprocessor control with display in 8 languages
- ▶ permanent display of system pressure and tank volume level
- ▶ 2 dry contacts (common fault, min. water level)
- ▶ data output through RS-485
- ▶ output permitting operation together with 'servitec levelcontrol' for deaerated water make-up
- ▶ patented, fully automated actuator valve operation
- ▶ easy to commission



Control units

Type	Article-No.	Product group	Power kW	Voltage	for hydraulic module
GS 1,1	6912500	38	2,2	230 V / 50 Hz	GH 50 / GH 70
GS 3	6912600	38	6,0	400 V / 50 Hz	GH 90 / GH 100

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Hydraulic module

Type	Article-No.	Weight kg	Product group	p ₀ bar	H / L / D mm	C
GH 50	6931000	210	38	≤ 4,0	1600 / 770 / 950	DN 80/PN 16
GH 70	6932000	210	38	≤ 6,0	1600 / 770 / 950	DN 80/PN 16
GH 90	6931400	278	38	≤ 8,0	1600 / 770 / 1035	DN 80/PN 16
GH 100	6931200	246	38	≤ 9,5	1600 / 770 / 950	DN 80/PN 16

p₀ = Input value on control panel
= Static height + vaporization pressure
+ 0.2 bar (recommended)

GG Basic vessel

Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
GG 1000	6920105	330	37	1000	2130	185	DN 65/PN 6
GG 1500	6920305	465	37	1200	2130	185	DN 65/PN 6
GG 2000	6920405	565	37	1200	2590	185	DN 65/PN 6
GG 3000	6920605	795	37	1500	2590	220	DN 65/PN 6
GG 4000	6920705	1080	37	1500	3160	220	DN 65/PN 6
GG 5000	6920805	1115	37	1500	3695	220	DN 65/PN 6

↑ V_n Nominal volume [Litres]

'gigamat' Total price

=

Control unit

Hydraulic module

GG Basic vessel

+

'gigamat' Options

reflex

reflex 'gigamat' - Options

GF Secondary vessel

Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	C
GF 1000	6930105	330	37	1000	2130	305	DN 65/PN 6
GF 1500	6930305	465	37	1200	2130	305	DN 65/PN 6
GF 2000	6930405	565	37	1200	2590	305	DN 65/PN 6
GF 3000	6930605	795	37	1500	2590	335	DN 65/PN 6
GF 4000	6930705	1080	37	1500	3160	335	DN 65/PN 6
GF 5000	6930805	1115	37	1500	3695	335	DN 65/PN 6

↑ V_n Nominal volume [Litres]



reflex 'SV1 Safety valve'

- for additional protection of GG and GF vessels for heating capacity >10.5 MW to be mounted in the connection line between 'gigamat' hydraulic module and GG primary vessel

Type	Article-No.	Product group
SV 1 x 5/4	6942100	81



reflex 'GE Extension module'

Note: included in delivery of GS 3 units

- analog output 0–10 V/4 - 20 mA for pressure and level indication at distance, with 6 digital inputs and 6 floating outputs
- for wall mounting including earthing type plug (230 V / 50 Hz)

Article-No.	Product group
7860500	39

Standard parameters: according to instruction manual

Special parameters: upon request



reflex 'GK Communication module'

- for the external operation of the control unit through a twin-core cable up to 1000 m range

Article-No.	Product group
7860600	39



reflex 'Bus module'

- for exchange of data between the Reflex control unit and the building central control technology (BMS)

Type	Article-No.	Product group
'Lon Works' Digital	7860000	86
'Lon Works'	7860100	86
'Profibus-DP'	7860200	86
'Ethernet'	7860300	86

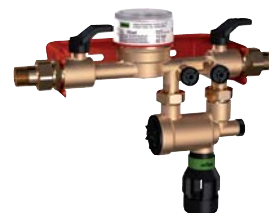


Deaeration, degassing and water make-up systems



reflex 'fillset'

- ▶ pre-fabricated assembly for direct connection of HVAC systems to water mains
- ▶ total quantity of make-up water is measured by a water meter
- ▶ prevents backflow of HVAC water into the water mains
- ▶ with German DVGW-approved BA-type backflow preventer
- ▶ including wall bracket and isolation valves



	Article-No.	Weight kg	Product group	Length mm	C
10 bar / 60 °C	with standard water meter				
	6811105	1.7	70	293	R ½, R ½
10 bar / 60 °C	with contact water meter				
	6811205	1.7	70	293	R ½, R ½

reflex 'fillset compact'

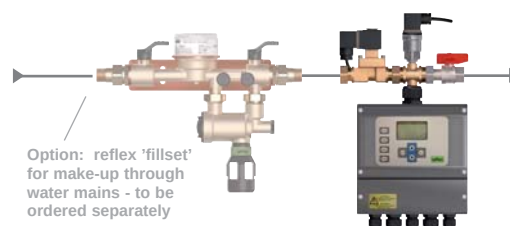
- ▶ pre-fabricated assembly for direct connection of HVAC systems to water mains
- ▶ prevents backflow of HVAC water into the water mains
- ▶ with German DVGW-approved BA-type backflow preventer
- ▶ including wall bracket and isolation valves



	Article-No.	Weight kg	Product group	Length mm	C
10 bar / 60 °C	6811305	0.9	70	175	R ½, R ½

reflex 'magcontrol'

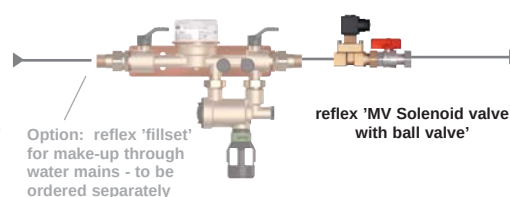
- ▶ monitored water make-up with pressure control for installations with conventional expansion vessel
- ▶ required pressure of mains water ≥ 1.3 bar above vessel preset pressure
- ▶ dry contact (common fault)
- ▶ when fixed connection to the drinking water mains, reflex 'fillset' has to be additionally installed



	Article-No.	Weight kg	Product group	Length mm	Height mm	C
10 bar / 90 °C	6812100	2.5	70	205	360	G ¾, G ½

reflex 'MV Solenoid valve with ball valve'

- ▶ for water make-up within systems which are equipped with pressurization units (compressor- or pump-controlled)
- ▶ operates on 230 V output from pressurization unit
- ▶ integrated as standard on reflex 'variomat' and 'gigamat'



	Article-No.	Product group	C
10 bar / 90 °C	7858300	35	G ¾, G ½

reflex 'fillcontrol'

- ▶ compact, automatic water make-up device for systems with conventional expansion vessels according to DIN 1988 and DIN EN 1717
- ▶ with system BA-type backflow preventer
- ▶ monitored water make-up
- ▶ dry contact (common fault)
- ▶ input pressure max. 10 bar
- ▶ output pressure 0.5 - 5 bar
- ▶ flow rate ca. 0.5 m³/h at $\Delta p = 1.5$ bar



CE

	Article-No.	Weight kg	Product group	H / L / G mm	C
10 bar / 70 °C	6811500	3.0	79	304 / 240 / 91	R ½ R ½

reflex 'control P'

- ▶ all purpose water make-up station for pressurization units as well as installations with conventional expansion vessels
- ▶ supply pressure of water mains max. 6 bar
- ▶ provided with break tank for the physical separation from the water mains
- ▶ complete assembly on attractive metal chassis
- ▶ terminal for external water meter
- ▶ permanent pressure indication on display
- ▶ dry contact (common fault)
- ▶ flow rate max. 180 ltr/h
- ▶ max. pump head 8.5 bar



CE

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	Article-No.	Weight kg	Product group	H / L / G mm	C
10 bar / 30 °C	7688500	17.5	70	390 / 350 / 350	G ¾, Rp ¾

reflex 'control P/gl'

- ▶ one-pump unit for the filling and make-up with glycol mixtures of solar, cooling or heating systems
- ▶ to be connected on-site to an open supply tank
- ▶ to be used in systems equipped with pressurization units as well as with conventional expansion vessels flow rate max. 4 m³/h
- ▶ max. pump head 5.5 bar



CE

	Article-No.	Weight kg	Product group	H / L / G mm	C
10 bar / 110 °C	6812300	17.5	70	610 / 440 / 290	Rp 1¼, Rp 1

NEW!

reflex 'servitec 30'

- ▶ with the unique vacuum spray-tube deaeration principle, suitable for systems < 8 m³
- ▶ for installations with conventional expansion vessels or pressurization units
- ▶ fully automated central degassing
- ▶ max. design pressure 8 bar
- ▶ max. operating temperature 70 °C (return flow)
- ▶ microprocessor control unit with graphic display
- ▶ 1 dry contact (common fault)



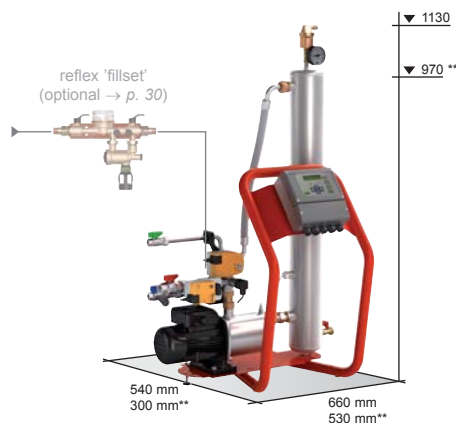
CE

Type	Article-No.	Weight kg	Product group	Operating pres. bar	System volume	Make-up flow rate
* 30	6830720	16.6	71	< 3,0*	< 8 m ³	0,05 m ³ /h

* implementing anti-freeze mixtures up to 50%

reflex 'servitec'

- ▶ with the unique vacuum spray-tube deaeration principle, suitable for systems < 100 m³
- ▶ for installations with conventional expansion vessels or pressurization units
- ▶ easy switching between the service mode 'magcontrol' or 'levelcontrol'
- ▶ fully automated central degassing and water make-up
- ▶ max. design pressure.: 8 bar - Typ 35, 60
10 bar - Typ 75, 95
- ▶ flow temperature 120 °C
- ▶ max. operating temperature 70 °C (return)
- ▶ microprocessor control with display in 8 languages
- ▶ permanent display of system pressure
- ▶ 1 dry contact (common fault)
- ▶ easy commissioning by the "Auto-Setup"
- ▶ minimum energy consumption through the patented self-optimizing operation
- ▶ on-site connection of the "SafeControl" water make-up to an open break tank (with glycol mixture) possible
- ▶ required supply pressure to the make-up connection: 0,1 - 6 bar



CE



Type	Article-No.	Weight kg	Product group	Operating pres. bar	System volume	Make-up flow rate
35	6829000	26	71	< 2,5	< 60 m ³	< 0,35 m ³ /h
60	6829100	32	71	< 4,5	< 100 m ³	< 0,55 m ³ /h
* 60/gl	6829700	32	71	< 4,5	< 20 m ³	< 0,55 m ³ /h
75	6829200	40	71	< 5,4	< 100 m ³	< 0,55 m ³ /h
95	6829300	42	71	< 7,2	< 100 m ³	< 0,55 m ³ /h

* implementing anti-freeze mixtures up to 50%

** 'servitec 35'

'reflex servitec' - Options upon request

- ▶ interface RS-485
- ▶ executions for system content > 100 m³
- ▶ executions for operating pressure > 9 bar
- ▶ executions for operating temperature max. 90 °C
- ▶ construction in stainless steel (for demineralized water)

reflex 'SE Extension module' for RS-485

- ▶ analog output 0–10 V/4 - 20 mA for pressure indication at distance, with 6 digital inputs and 6 floating outputs
- ▶ for wall mounting including earthing type plug (230 V / 50 Hz)

Article-No.	Product group
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Standard parameters: according to instruction manual

7860400	35
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Special parameters: upon request



reflex 'Bus-Modul' for RS-485

- ▶ for exchange of data between the Reflex control unit and the building central control technology (BMS)

Type	Article-No.	Product group
'Lon Works' Digital	7860000	86
'Lon Works'	7860100	86
'Profibus-DP'	7860200	86
'Ethernet'	7860300	86



reflex 'fillsoft'

- ▶ water softener for the initial filling and water make-up of heating systems*
- ▶ 'fillsoft I': fill capacity of 6.000 ltr/°D
- ▶ 'fillsoft II': fill capacity of 12.000 ltr/°D
- ▶ incl. isolation valve, sampling tap and flow reducer**
- ▶ 'FP': replacement cartridge for 'fillsoft I or II'



Type	Article-No.	Weight kg	Product group	H / L / D mm	C
8 bar / 40 °C					
'fillsoft I'	6811600	4.1	78	600 / 260 / 130	Rp ½, Rp ½
'fillsoft II'	6811700	7.6	78	600 / 380 / 130	Rp ½, Rp ½
'FP'	6811800	1.6	78	---	---

* in order to record the available volume of softened water we recommend the 'fillmeter' → below

** can be installed together with the reflex 'fillset compact' backflow preventer → p. 26

reflex 'FS softmix'

- ▶ adjustable bypass to obtain the desired water hardness
- ▶ also suitable for retrofitting on 'fillsoft I or II' (from 'fillsoft' 2007 model)

Article-No.	Weight kg	Product group	H / L mm	C
9119219	0.25	78	---	Rp ¼, Rp ¼



34

reflex 'FE Pressure sensor'

- ▶ pressure sensor required for the assembly of reflex 'fillsoft' together with 'fillcontrol'
- ▶ incl. T-piece, cable connection and check valve

Article-No.	Weight kg	Product group	H / L mm	C
9112004	0.3	78	80 / 70	Rp ½, Rp ½



reflex 'fillmeter'

- ▶ digital water meter for use with reflex 'fillsoft'
- ▶ allows to control the soft water capacity
- ▶ with audible alarm and visual signal as well as dry contact (max. 24V / 100 mA)
- ▶ monitoring of the operating period of the cartridges
- ▶ display: soft water capacity, flow and total added volume

Article-No.	Weight kg	Product group	H / L mm	C
9119193	0.4	78	80 / 100	R ½, R ½



reflex 'GH Total hardness measuring set'

- ▶ set for determination of the total hardness of the make-up water
- ▶ for approximately 20 measures

Article-No.	Product group
6811900	86



Accessories and reflex 'ex-separators'



reflex 'extop'

Automatic air vent

reflex 'extop'

- ▶ high venting capacity

▶ solid brass design

▶ designed to facilitate venting or admitting air into the system with very high reliability

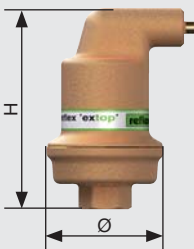
▶ safe operation, even if the system medium is charged with impurities
- ▶ range of products for different temperatures and applications

reflex 'extop' - Brass

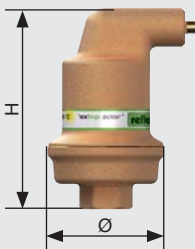
Type	Article-No.	Weight kg	Product group	Qpc*	C	Ø D mm	H mm
10 bar / 110 °C							
T 1/2	9250000	0.7	82	12	Rp 1/2	65	112

reflex 'extop solar' - Brass

Type	Article-No.	Weight kg	Product group	Qpc*	C	Ø D mm	H mm
10 bar / 180 °C							
T 1/2 S	9250600	0.7	82	12	Rp 1/2	65	112



'extop'



'extop solar'

reflex 'exair'

- removes circulating free air and gas bubbles
- efficient hydraulic balancing after filling operations
- minimum pressure drop
- connection diameter Rp ¾ to DN 300
- complete range of products in terms of operating pressures, temperatures and materials
- solar variant available

reflex 'exair solar' - Brass

Type 10 bar / 180 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 22 S	9251600	1.2	82	12	22 mm***	1,25	106	65	153 **
A 3/4 S	9251610	1.1	82	12	Rp ¾	1,25	85	65	153 **
A 1 S	9251620	1.3	82	8	Rp 1	2,00	88	65	180 **
A 1 1/4 S	9251630	1.4	82	8	Rp 1¼	3,70	88	65	200 **
A 1 1/2 S	9251640	1.6	82	8	Rp 1½	5,00	88	65	234 **

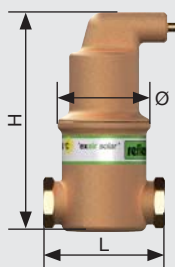
reflex 'exair solar' - Brass, vertical

Type 10 bar / 180 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 22 SV	9251700	2.0	82	8	22 mm***	1,25	104	65	220 **
A 3/4 SV	9251710	1.9	82	8	Rp ¾	1,25	84	65	210 **
A 1 SV	9251720	1.9	82	8	Rp 1	1,25	84	65	210 **

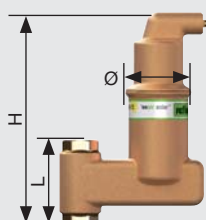
reflex 'exair' - Brass

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 22	9251000	1.2	82	12	22 mm***	1,25	106	65	153 **
A 3/4	9251010	1.1	82	12	Rp ¾	1,25	85	65	153 **
A 1	9251020	1.3	82	8	Rp 1	2,00	88	65	180 **
A 1 1/4	9251030	1.4	82	8	Rp 1¼	3,70	88	65	200 **
A 1 1/2	9251040	1.6	82	8	Rp 1½	5,00	88	65	234 **
A 2	9251050	3.9	82	1	Rp 2	7,50	132	100	275 **

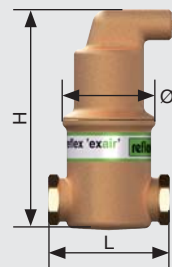
* Quantity per carton
 ** Thermal insulation available → p.43
 *** Compression coupling



'exair solar'
A 22 S - A 1 1/2 S



'exair solar' • vertical
A 22 SV - A 1 SV



'exair'
A 22 - A 2

reflex 'exair' - Brass, vertical

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 22 V	9251500	2.0	82	8	22 mm***	1,25	104	65	210 **
A 3/4 V	9251510	1.9	82	8	Rp ¾	1,25	84	65	210 **
A 1 V	9251520	1.9	82	8	Rp 1	2,00	84	65	210 **

reflex 'exair' - Welding connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 60.3	9251100	9	83	60,3	12,5	260	159	470 **
A 76.1	9251110	9	83	76,1	20	260	159	470 **
A 88.9	9251120	18	83	88,9	27	370	219	590 **
A 114.3	9251130	18	83	114,3	47	370	219	590 **
A 139.7	9251140	42	83	139,7	72	525	324	765 **
A 168.3	9251150	42	83	168,3	108	525	324	765 **
A 219.1	9251160	48	83	219,1	180	650	406	975
A 273.0	9251170	135	83	273,0	288	750	508	1215
A 323.9	9251180	200	83	323,9	405	850	610	1430

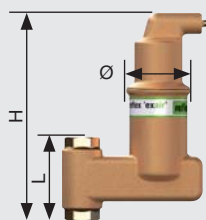
reflex 'exair' - Flanged connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
A 50	9251300	14	83	DN 50/PN 16	12,5	350	159	470 **
A 65	9251310	15	83	DN 65/PN 16	20	350	159	470 **
A 80	9251320	25	83	DN 80/PN 16	27	470	219	590 **
A 100	9251330	27	83	DN 100/PN 16	47	470	219	590 **
A 125	9251340	54	83	DN 125/PN 16	72	635	324	765 **
A 150	9251350	57	83	DN 150/PN 16	108	635	324	765 **
A 200	9251360	106	83	DN 200/PN 16	180	775	406	975
A 250	9251370	170	83	DN 250/PN 16	288	890	508	1215
A 300	9251380	250	83	DN 300/PN 16	405	1005	610	1430

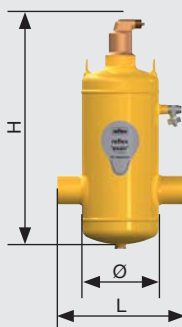
* Quantity per carton

** Thermal insulation available → p.43

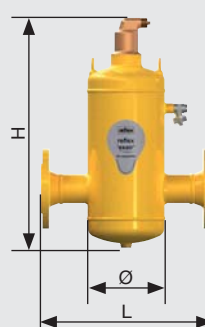
*** Compression coupling



'exair'
A 22 V - A 1 V



'exair'
A 60.3 - 323.9



'exair'
A 50 - 300

reflex 'exdirt'

- ▶ fully automatic continuous operation
- ▶ minimum maintenance
- ▶ suitable for large and small systems
- ▶ connection diameter Rp ¾ to DN 300
- ▶ permanent free system flow
- ▶ particle removal from 5 µm (= 0.005 mm)
- ▶ sludge removal is possible while the system is in line operation
- ▶ no isolation valves or bypass lines required
- ▶ minimum pressure drop
- ▶ complete range of products in terms of operating pressures and materials

reflex 'exdirt' - Brass

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
D 22	9252000	1.1	82	12	22 mm***	1,25	106	65	116 **
D 3/4	9252010	1.1	82	12	Rp ¾	1,25	85	65	116 **
D 1	9252020	1.2	82	12	Rp 1	2,00	88	65	143 **
D 1 1/4	9252030	1.3	82	12	Rp 1¼	3,70	88	65	161 **
D 1 1/2	9252040	1.5	82	12	Rp 1½	5,00	88	65	197 **
D 2	9252050	3.9	82	12	Rp 2	7,50	132	100	238

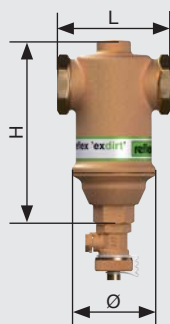
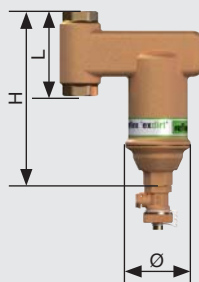
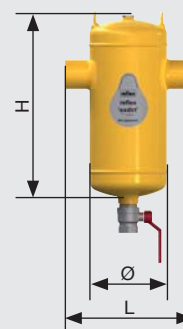
reflex 'exdirt' - Brass, vertical

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
D 22 V	9252500	1.9	82	8	22 mm***	1,25	104	65	182 **
D 3/4 V	9252510	1.8	82	8	Rp ¾	1,25	84	65	172 **
D 1 V	9252520	1.8	82	8	Rp 1	2,00	84	65	172 **

reflex 'exdirt' - Welding connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
D 60.3	9252100	9	83	60,3	12,5	260	159	395 **
D 76.1	9252110	9	83	76,1	20	260	159	395 **
D 88.9	9252120	17	83	88,9	27	370	219	515 **
D 114.3	9252130	17	83	114,3	47	370	219	515 **
D 139.7	9252140	41	83	139,7	72	525	324	690 **
D 168.3	9252150	42	83	168,3	108	525	324	690 **
D 219.1	9252160	83	83	219,1	180	650	406	900
D 273.0	9252170	135	83	273,0	288	750	508	1145
D 323.9	9252180	200	83	323,9	405	850	610	1360

* Quantity per carton

** Thermal insulation available → p.43
*** Compression coupling'exdirt'
D 22 - 2'exdirt' • vertical
D 22 V - 1'exdirt'
D 60.3 - 323.9

reflex 'exdirt' - Flanged connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
D 50	9252300	13	83	DN 50/PN 16	12,5	350	159	395 *
D 65	9252310	15	83	DN 65/PN 16	20	350	159	395 *
D 80	9252320	25	83	DN 80/PN 16	27	470	219	515 *
D 100	9252330	26	83	DN 100/PN 16	47	470	219	515 *
D 125	9252340	54	83	DN 125/PN 16	72	635	324	690 *
D 150	9252350	56	83	DN 150/PN 16	108	635	324	690 *
D 200	9252360	105	83	DN 200/PN 16	180	775	406	900
D 250	9252370	170	83	DN 250/PN 16	288	890	508	1145
D 300	9252380	250	83	DN 300/PN 16	405	1005	610	1360

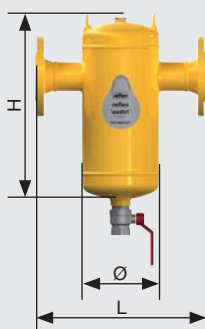
* Thermal insulation available → p.43

reflex 'exdirt' - Inspection flange, welding connection

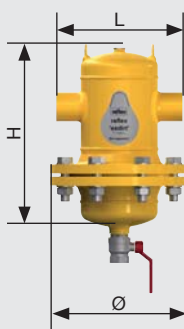
Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
D 60.3 R	9252200	23	83	60,3	12,5	350	159	395
D 76.1 R	9252210	23	83	76,1	20	350	159	395
D 88.9 R	9252220	36	83	88,9	27	470	219	515
D 114.3 R	9252230	37	83	114,3	47	470	219	515
D 139.7 R	9252240	85	83	139,7	72	635	324	690
D 168.3 R	9252250	86	83	168,3	108	635	324	690
D 219.1 R	9252260	129	83	219,1	180	650	406	900
D 273.0 R	9252270	230	83	273,0	288	775	508	1145
D 323.9 R	9252280	340	83	323,9	405	890	610	1360

reflex 'exdirt' - Inspection flange, flanged connection

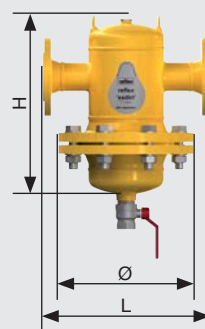
Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
D 50 R	9252400	28	83	DN 50/PN 16	12,5	350	159	395
D 65 R	9252410	29	83	DN 65/PN 16	20	350	159	395
D 80 R	9252420	44	83	DN 80/PN 16	27	470	219	515
D 100 R	9252430	46	83	DN 100/PN 16	47	470	219	515
D 125 R	9252440	98	83	DN 125/PN 16	72	635	324	690
D 150 R	9252450	100	83	DN 150/PN 16	108	635	324	690
D 200 R	9252460	151	83	DN 200/PN 16	180	775	406	900
D 250 R	9252470	265	83	DN 250/PN 16	288	890	508	1145
D 300 R	9252480	390	83	DN 300/PN 16	405	1005	610	1360



'exdirt'
D 50 - 300



'exdirt' with inspection flange
D 60.3 R - 323.9 R



'exdirt' with inspection flange
D 50 R - 300 R

reflex 'extwin'

- removes circulating free air bubbles
- efficient hydraulic balancing after filling operations
- fully automatic continuous operation
- minimum maintenance
- connection diameter Rp ¾ to DN 300
- particle removal from 5 µm (= 0.005 mm)
- sludge removal is possible while the system is in line operation
- no isolation valves or bypass lines required (does not apply for models with inspection flange)
- minimum pressure drop
- complete range of products in terms of operating pressures and materials

reflex 'extwin' - Brass

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
TW 22	9253000	1.8	82	6	22 mm**	1,25	106	65	257
TW 1	9253010	1.7	82	6	Rp1	2	88	65	257

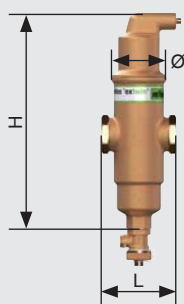
reflex 'extwin' - Brass, vertical

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Qpc*	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
TW 22 V	9253500	2.1	82	6	22 mm**	1,25	97	65	246

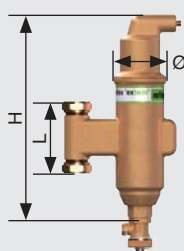
reflex 'extwin' - Welding connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{max}$ m³/h	L mm	Ø D mm	H mm
TW 60.3	9253100	12	83	60,3	12,5	260	159	630
TW 76.1	9253110	12	83	76,1	20	260	159	630
TW 88.9	9253120	24	83	88,9	27	370	219	785
TW 114.3	9253130	24	83	114,3	47	370	219	785
TW 139.7	9253140	58	83	139,7	72	525	324	1045
TW 168.3	9253150	58	83	168,3	108	525	324	1045
TW 219.1	9253160	113	83	219,1	180	650	406	1315
TW 273.0	9253170	215	83	273,0	288	750	508	1715
TW 323.9	9253180	275	83	323,9	405	850	610	2025

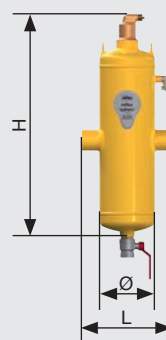
* Quantity per carton
 ** Thermal insulation available → p.43
 *** Compression coupling



'extwin'



'extwin' • vertical



'extwin'
TW 60.3 - 323.9

reflex 'extwin' - Flanged connection

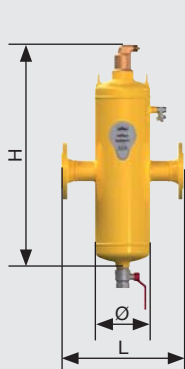
Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
TW 50	9253300	17	83	DN 50/PN 16	12,5	350	159	630
TW 65	9253310	18	83	DN 65/PN 16	20	350	159	630
TW 80	9253320	31	83	DN 80/PN 16	27	470	219	785
TW 100	9253330	33	83	DN 100/PN 16	47	470	219	785
TW 125	9253340	70	83	DN 125/PN 16	72	635	324	1045
TW 150	9253350	73	83	DN 150/PN 16	108	635	324	1045
TW 200	9253360	135	83	DN 200/PN 16	180	775	406	1315
TW 250	9253370	250	83	DN 250/PN 16	288	890	508	1715
TW 300	9253380	325	83	DN 300/PN 16	405	1005	610	2025

reflex 'extwin' - Inspection flange, welding connection

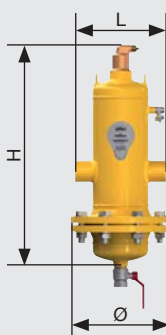
Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
TW 60.3 R	9253200	29	83	60,3	12,5	350	159	630
TW 76.1 R	9253210	29	83	76,1	20	350	159	630
TW 88.9 R	9253220	46	83	88,9	27	470	219	785
TW 114.3 R	9253230	47	83	114,3	47	470	219	785
TW 139.7 R	9253240	102	83	139,7	72	635	324	1045
TW 168.3 R	9253250	102	83	168,3	108	635	324	1045
TW 219.1 R	9253260	182	83	219,1	180	650	406	1315
TW 273.0 R	9253270	320	83	273,0	288	775	508	1715
TW 323.9 R	9253280	450	83	323,9	405	890	610	2025

reflex 'extwin' - Inspection flange, flanged connection

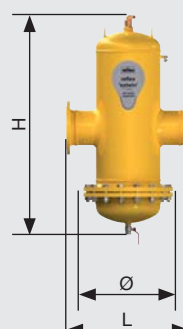
Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	C	$\dot{V}_{\max}$ m³/h	L mm	Ø D mm	H mm
TW 50 R	9253400	34	83	DN 50/PN 16	12,5	350	159	630
TW 65 R	9253410	35	83	DN 65/PN 16	20	350	159	630
TW 80 R	9253420	54	83	DN 80/PN 16	27	470	219	785
TW 100 R	9253430	55	83	DN 100/PN 16	47	470	219	785
TW 125 R	9253440	114	83	DN 125/PN 16	72	635	324	1045
TW 150 R	9253450	117	83	DN 150/PN 16	108	635	324	1045
TW 200 R	9253460	204	83	DN 200/PN 16	180	775	406	1315
TW 250 R	9253470	340	83	DN 250/PN 16	288	890	508	1715
TW 300 R	9253480	480	83	DN 300/PN 16	405	1005	610	2025



'extwin'
TW 50 - 300



'extwin' with inspection flange
TW 60.3 R - 323.9 R



'extwin' with inspection flange
TW 50 R - 300 R

reflex 'exiso'

- ▶ EPP foam insulation
- ▶ fits reflex 'exair' and 'exdirt' brass types A 22 - 1½ and steel types DN 50 - DN 150
- ▶ suitable for horizontal as well as vertical brass models
- ▶ consisting of two moulded hulls which are easily individually adaptable using the cut-off marks
- ▶ inclusive snap closure or tightening strap

reflex 'exiso'

- ▶ for 'exair' type A 22 - A 1½ (brass)

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Thickness mm	H mm	Ø D mm
A 22 - 1½	9254810	0.15	82	15	215 - 275	125

reflex 'exiso'

- ▶ for 'exdirt' type D 22 - D 1½ (brass)

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Thickness mm	H mm	Ø D mm
D 22 - 1½	9254820	0.15	82	15	140 - 180	140

reflex 'exiso'

- ▶ for 'exair' and 'exdirt' (steel) with flanged or welding connection

Type 10 bar / 110 °C	Article-No.	Weight kg	Product group	Thickness mm	H mm	Ø D mm
50 - 76.1	9254830	0.4	82	30.5	447	228
80 - 114.3	9254840	1.0	82		567	290
125 - 168.3	9254850	1.2	82		742	395

* suitable for models with or without connection flange from DN 50 - DN 150 or 160.3 - 168.3



'exiso'
for A 22 - 1½



'exiso'
for D 22 - 1½

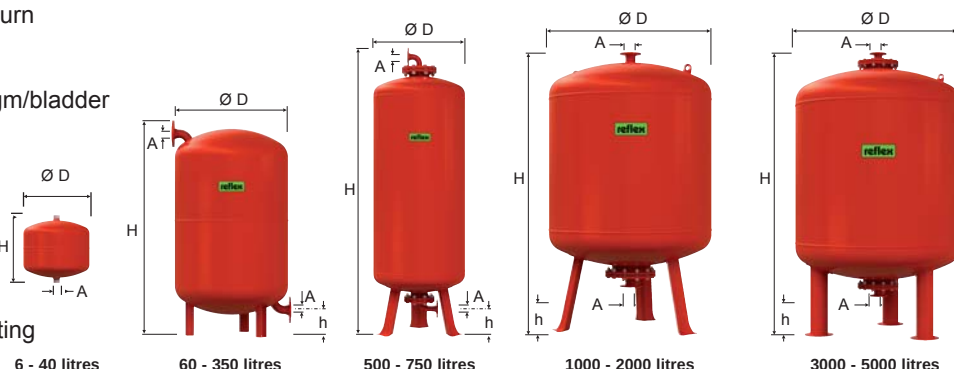


'exiso'
for 50 - 168.3

reflex 'V Intermediate tank'



- necessary for installations subject to German DIN 4807 norm with return temperatures $> 70^{\circ}\text{C}$ or cooling systems at $\leq 0^{\circ}\text{C}$
- to avoid faster aging of diaphragm/bladder when subjected to higher temperatures (heating) and to prevent condensation water from freezing (cooling)
- meets or exceeds EC norms for pressure vessels 97/23/EC
- flanged water connections
- colour: red, durable powder coating



Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	h mm	A
10 bar / 120 °C							
V 6	7403100	2	24	206	245	---	R ¾
V 12	7403200	3	24	280	285	---	R ¾
V 20	7402000	4	24	280	360	---	R ¾
V 40	7403400	8	24	409	562	113	R 1
V 60	7402600	23	24	409	730	170	R 1
V 200	7701800	43	24	634	900	142	DN 40 / PN 16
V 300	7701900	48	24	634	1200	142	DN 40 / PN 16
V 350	7702400	51	24	634	1340	142	DN 40 / PN 16

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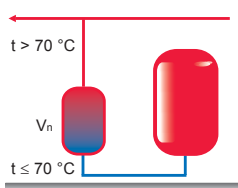
6 bar / 120 °C							
V 500	7852800	79	24	750	1720	210	DN 40 / PN 6
V 750	7851800	325	24	750	2330	210	DN 40 / PN 6
V 1000	7851905	560	24	1000	2020	305	DN 65 / PN 6
V 1500	7852305	780	24	1200	2020	305	DN 65 / PN 6
V 2000	7852405	940	24	1200	2480	305	DN 65 / PN 6
V 3000	7852505	1405	24	1500	2560	340	DN 65 / PN 6
V 4000	7853405	1930	24	1500	3130	340	DN 65 / PN 6
V 5000	7854805	2015	24	1500	3670	340	DN 65 / PN 6

10 bar / 120 °C							
V 1000	7400205	675	24	1000	2055	285	DN 65 / PN 16
V 1500	7400305	935	24	1200	2055	285	DN 65 / PN 16
V 2000	7400405	960	24	1200	2505	285	DN 65 / PN 16
V 3000	7400505	1685	24	1500	2600	315	DN 65 / PN 16
V 4000	7400605	2315	24	1500	3180	315	DN 65 / PN 16
V 5000	7400705	2420	24	1500	3720	315	DN 65 / PN 16

- Option models > 5000 litres, > 10 bar and $> 120^{\circ}\text{C}$ upon request

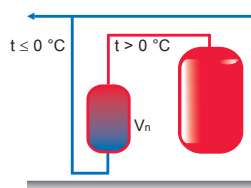
Function principle

Heating systems



In the interest of the longlife of the rubber bladder, it is recommended that reflex 'V Intermediate tanks' are used as cold water buffers when operating temperatures are above 70°C .

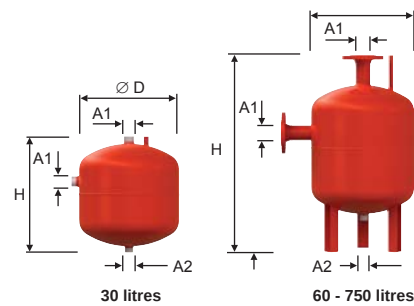
Cooling systems



reflex 'V Intermediate tanks' are required, so that the condensing water in the expansion tank does not freeze and damage the rubber bladder.

reflex 'EB Dirt collector'

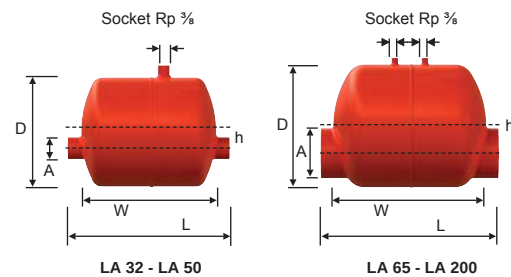
- ▶ separates and collects dirt (magnetite, welding grid, sand etc.) from the systemwater
- ▶ protects and improves average lifetime of components (pumps, valves, heat exchangers etc.)
- ▶ minimum pressure drop
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ colour: red, durable powder coating



Type	Article-No.	Weight kg	Product group	Ø D mm	H mm	A1	A2
10 bar / 120 °C							
EB 30	7636000	11	25	409	455	R 1¼	R 1
EB 60	7635100	22	25	409	770	DN 50/PN 16	R 1
EB 80	7636200	30	25	480	765	DN 65/PN 16	R 1
EB 100	7636300	34	25	480	870	DN 80/PN 16	R 1
6 bar / 120 °C							
EB 180	7632000	76	25	600	1110	DN 100/PN 6	R 1
EB 300	7633000	103	25	600	1600	DN 125/PN 6	R 1
EB 400	7634000	133	25	750	1500	DN 150/PN 6	R 1
EB 750	7634100	225	25	750	2215	DN 250/PN 6	R 1

reflex 'LA Air separator'

- ▶ separates gas bubbles (air, nitrogen etc.) from heating and cooling systems
- ▶ increases system efficiency and average lifetime of components
- ▶ minimum pressure drop
- ▶ most suitable for rooftop plantrooms at low pressure
- ▶ colour: red, durable powder coating

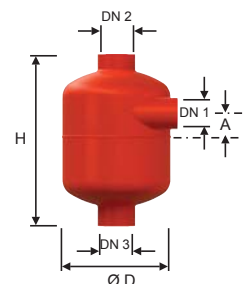


45

Type	Article-No.	Weight kg	Product group	L mm	W mm	h mm	D mm	A
10 bar / 120 °C								
LA 32	7671000	3.5	72	300	255	30	206	DN 32
LA 40	7672000	3.5	72	300	255	40	206	DN 40
LA 50	7673000	3.6	72	300	255	40	206	DN 50
LA 65	7674000	5.4	72	590	310	60	280	DN 65
LA 80	7675000	6.2	72	590	310	60	280	DN 80
LA 100	7676000	6.7	72	590	310	50	280	DN 100
LA 125	7677000	6.8	72	590	310	40	280	DN 125
LA 150	7678000	9.4	72	590	510	90	409	DN 150
LA 200	7679000	16.0	72	590	510	40	409	DN 200

reflex 'T Expansion trap'

- ▶ separates water from steam in heating installation ≤ 100 °C
- ▶ to be connected to the safety valve according to DIN EN 12828
- ▶ allows evaporation without danger to the ambience
- ▶ colour: red, durable powder coating



Type	Article-No.	Weight kg	Product group	H mm	A mm	Ø D mm	DN 1 DN	DN 2 DN	DN 3 DN
T 170	7680000	3.3	73	328	55	206	50	65	65
T 270	7681000	5.8	73	400	65	280	65	80	80
T 380	7682000	10.9	73	528	75	409	80	100	100
T 480	7683000	20.3	73	710	115	480	125	150	150
T 550	7684000	32.3	73	896	125	634	150	200	200

reflex 'Wall hung holder' for vessels 8 - 25 litres

- ▶ bracket with tightening strap for vertical mounting

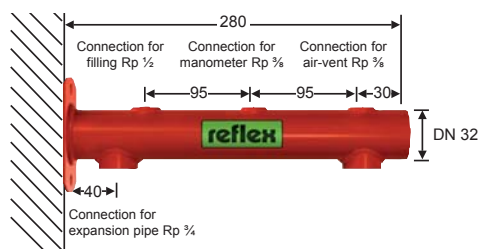
Type	Article-No.	Product group	Qpc*
8 - 25 l	7611000	75	36

* = Quantity per carton



- ▶ holder with multiple connections

Type	Article-No.	Product group
8 - 25 l	7612000	75



reflex 'Digital pressure gauge'

- ▶ display range up to approximately 9 bar
- ▶ pressure indication in bar, kPa and psi

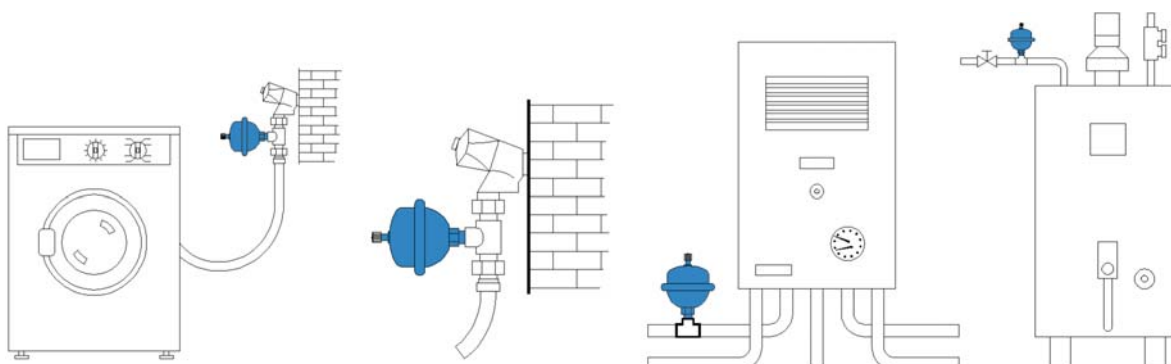
Article-No.	Product group
9119198	86



reflex 'Water shock arrestor'

- ▶ to be used along devices where sudden pressure build-up is caused by quick shut-off such as washing machines, dish washers etc.
- ▶ meets or exceeds EC norms for pressure vessels 97/23/EC
- ▶ volume 165 cm³
- ▶ preset pressure 4 bar
- ▶ colour: blue, durable powder coating finish

Article-No.	Product group
10 bar / 70 °C 7351000	74





reflex 'longtherm'



- suitable for district heating, solar heating, heat pumps, heat recovery units, hydraulic and fuel units
- AISI 316 stainless steel, brazed with pure copper
- threaded or flanged connections (connection variants → p. 36)
- meets or exceeds EC norms for pressure vessels 97/23/EC
- max. operating temperature 195 °C
- max. operating pressure 30 bar

- PU-thermal insulation, thickness 20 mm; consisting of two moulded hulls with connection clips, coated with PS-foil
- from size rhc 150/180 - 200 mineral rock wool thermal insulation, thickness 40 mm, aluminium cover; size rhc 300, thickness 65 mm

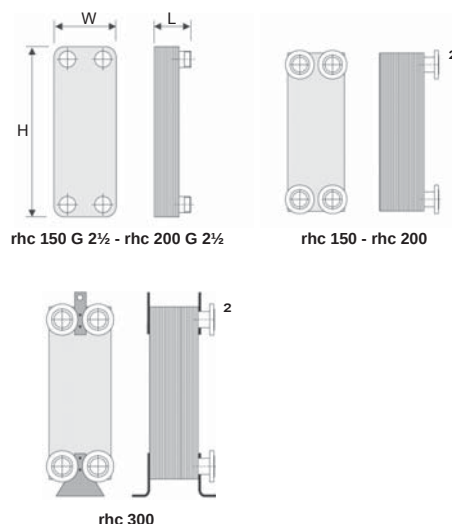
Type	H mm	W mm	L mm	C
rhc- 15	204	74	n 2,3 + 8 + 20	4 x G 3/4
rhc- 40	335	124	n 2,3 + 10 + 20	4 x G 1
rhc- 60	532	124	n 2,3 + 10 + 20	4 x G 1 1/4
r...c- 85 G2	532	271	n 2,3 + 11 + 65	4 x G 2
r...c- 85	532	271	n 2,3 + 11 + 100	4 x DN 50/PN 40
rhc- 150 G 2 1/2	532	271	n 2,4 + 12 + 65	4 x G 2 1/2
rhc- 150	532	271	n 2,4 + 12 + 62	4 x DN 65/PN 40 ¹
rhc- 200 G 2 1/2	802	271	n 2,4 + 12 + 65	4 x G 2 1/2
rhc- 200	802	271	n 2,4 + 12 + 62	4 x DN 65/PN 40 ¹
rhc- 300	875	386	n 2,4 + 21 + 143	4 x DN 100/PN 40 ¹

n = number of plates

¹ for this flange, order counter flange

² for this flange, order counter flange

→ Accessories p. 50



'longtherm'

Size/ No. of plates	rhc Article-No.	rlc Article-No.	Weight kg	Product group
15/ 10	6712100	---	1.4	76
15/ 20	6712200	---	1.9	76
15/ 30	6712300	---	2.4	76
40/ 10	6713100	---	3.2	76
40/ 20	6713200	---	4.5	76
40/ 30	6713300	---	5.8	76
40/ 40	6713400	---	7.1	76
40/ 50	6713500	---	8.4	76
40/ 60	6713600	---	9.7	76
60/ 6	6714100	---	3.7	76
60/ 8	6714200	---	3.9	76
60/ 10	6714300	---	4.4	76
60/ 14	6714400	---	5.2	76
60/ 20	6714500	---	6.5	76
60/ 24	6714600	---	7.3	76
60/ 30	6714700	---	8.6	76
60/ 40	6714800	---	10.7	76
60/ 50	6714900	---	12.8	76
60/ 60	6715000	---	14.9	76
60/ 80	6715100	---	19.1	76
60/100	6715200	---	23.3	76
85/ 30 G2	6719100	6718100	27.6	76
85/ 40 G2	6719200	6718200	33.0	76
85/ 50 G2	6719300	6718300	38.4	76
85/ 60 G2	6719400	6718400	43.8	76
85/ 80 G2	6719500	6718500	54.6	76
85/100 G2	6719600	6718600	65.4	76
85/120 G2	6719700	6718700	76.2	76
85/ 30	6717100	6716100	38.0	76
85/ 40	6717200	6716200	43.4	76
85/ 50	6717300	6716300	48.8	76
85/ 60	6717400	6716400	54.2	76
85/ 80	6717500	6716500	65.0	76
85/100	6717600	6716600	75.8	76
85/120	6717700	6716700	86.6	76

'Thermal insulation rc'

Size/ No. of plates	Article-No.	Product group
15/10 - 20	6750000	77
15/10 - 20	6750000	77
15/30	6750100	77
40/10 - 20	6750200	77
40/10 - 20	6750200	77
40/30 - 40	6750300	77
40/30 - 40	6750300	77
40/50 - 60	6750400	77
40/50 - 60	6750400	77
60/ 6 - 24	6750500	77
60/ 6 - 24	6750500	77
60/ 6 - 24	6750500	77
60/ 6 - 24	6750500	77
60/ 6 - 24	6750500	77
60/30 - 40	6750600	77
60/30 - 40	6750600	77
60/50 - 60	6750700	77
60/50 - 60	6750700	77
60/80 - 100	6750800	77
60/80 - 100	6750800	77
85/30 - 40	6750900	77
85/30 - 40	6750900	77
85/50 - 60	6751000	77
85/50 - 60	6751000	77
85/80 - 100	6751100	77
85/80 - 100	6751100	77
85/120	6751200	77
85/30 - 40	6750900	77
85/30 - 40	6750900	77
85/50 - 60	6751000	77
85/50 - 60	6751000	77
85/80 - 100	6751100	77
85/80 - 100	6751100	77
85/120	6751200	77



'longtherm'

Size/ No. of plates	rhc Article-No.	Weight kg	Product group
150/ 50 G 2½	6721100	39.4	76
150/ 60 G 2½	6721200	44.8	76
150/ 80 G 2½	6721300	55.6	76
150/100 G 2½	6721400	66.4	76
150/120 G 2½	6721500	77.2	76
150/150 G 2½	6721600	93.4	76
150/180 G 2½	6721800	109.6	76
150/200 G 2½	6721700	120.4	76
150/ 50	6720100	45.8	76
150/ 60	6720200	51.2	76
150/ 80	6720300	62.0	76
150/100	6720400	72.8	76
150/120	6720500	83.6	76
150/150	6720600	99.8	76
150/180	6720800	116.0	76
150/200	6720700	126.8	76
200/ 50 G 2½	6723100	53.9	76
200/ 60 G 2½	6723200	61.9	76
200/ 80 G 2½	6723300	77.9	76
200/100 G 2½	6723400	93.9	76
200/120 G 2½	6723500	109.9	76
200/150 G 2½	6723600	133.9	76
200/180 G 2½	6723800	157.9	76
200/200 G 2½	6723700	173.9	76
200/ 50	6722100	60.3	76
200/ 60	6722200	68.3	76
200/ 80	6722300	84.3	76
200/100	6722400	100.3	76
200/120	6722500	116.3	76
200/150	6722600	140.3	76
200/180	6722800	164.3	76
200/200	6722700	180.3	76
300/ 50	6724100	114.5	76
300/ 60	6724200	127.0	76
300/ 80	6724300	152.0	76
300/100	6724400	177.0	76
300/120	6724500	202.0	76
300/150	6724600	239.5	76
300/180	6724900	277.0	76
300/200	6724700	302.0	76

'Thermal insulation rc'

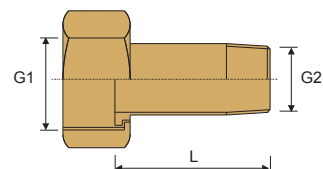
Size/ No. of plates	Article-No.	Product group
150/ 50 - 60	6751300	77
150/ 50 - 60	6751300	77
150/ 80 - 100	6751400	77
150/ 80 - 100	6751400	77
150/120 - 150	6751500	77
150/120 - 150	6751500	77
150/180 - 200	6751600	77
150/180 - 200	6751600	77
150/ 50 - 60	6751300	77
150/ 50 - 60	6751300	77
150/ 80 - 100	6751400	77
150/ 80 - 100	6751400	77
150/120 - 150	6751500	77
150/120 - 150	6751500	77
150/180 - 200	6751600	77
150/180 - 200	6751600	77
200/ 50 - 80	6751700	77
200/ 50 - 80	6751700	77
200/ 50 - 80	6751700	77
200/100 - 120	6751800	77
200/100 - 120	6751800	77
200/150	6751900	77
200/180 - 200	6752000	77
200/180 - 200	6752000	77
200/ 50 - 80	6751700	77
200/ 50 - 80	6751700	77
200/ 50 - 80	6751700	77
200/100 - 120	6751800	77
200/100 - 120	6751800	77
200/150	6751900	77
200/180 - 200	6752000	77
200/180 - 200	6752000	77
300/ 50 - 80	6752100	77
300/ 50 - 80	6752100	77
300/ 50 - 80	6752100	77
300/100 - 150	6752200	77
300/100 - 150	6752200	77
300/100 - 150	6752200	77
300/180 - 200	6752300	77
300/180 - 200	6752300	77

reflex 'longtherm' Connection variants

- screw connections with flat sealing ring, including gasket, system connection as external thread, soldering piece or welding socket piece
- rhc 150 and above: counter flange available (option)

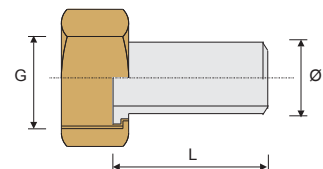
External thread - brass*

Connection for type	Article-No.	Product group	G1	G2	L mm
rhc- 15	6762100	77	$\frac{3}{4}$	$\frac{1}{2}$	36
rhc- 40	6762200	77	1	$\frac{3}{4}$	41
rhc- 60	6762300	77	$1\frac{1}{4}$	1	51
r...c- 85	6762400	77	2	$1\frac{1}{2}$	60
rhc- 150	6762500	77	$2\frac{1}{2}$	2	66
rhc- 200	6762500	77	$2\frac{1}{2}$	2	66



Welding point - steel*

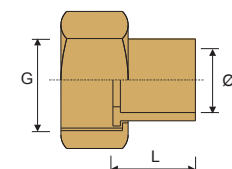
Connection for type	Article-No.	Product group	G1	Ø mm	L mm
rhc- 15	6760100	77	$\frac{3}{4}$	21,2	30
rhc- 40	6760200	77	1	26,9	30
rhc- 60	6760300	77	$1\frac{1}{4}$	33,7	40
r...c- 85	6760400	77	2	48,3	40
rhc- 150	6760500	77	$2\frac{1}{2}$	60,3	50
rhc- 200	6760500	77	$2\frac{1}{2}$	60,3	50



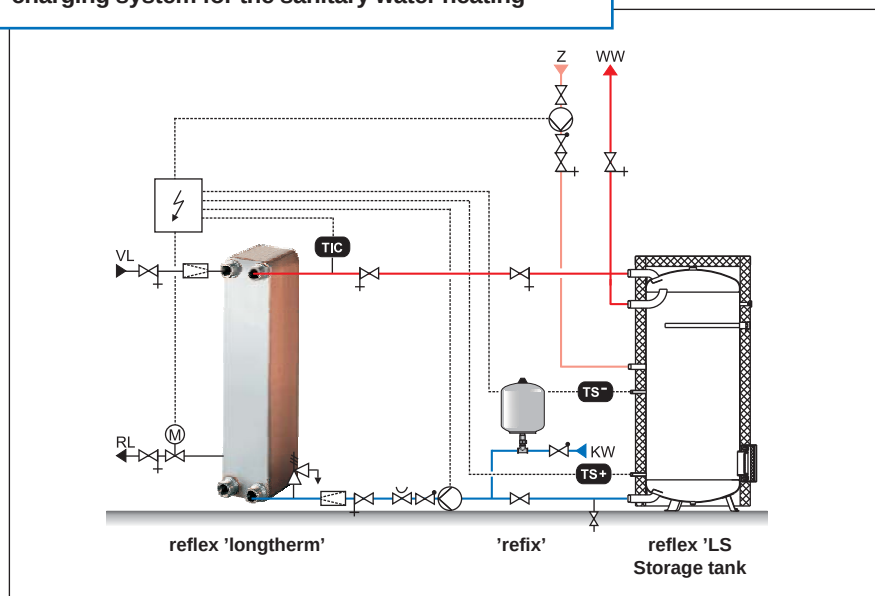
Solder end - brass*

Connection for type	Article-No.	Product group	G1	Ø mm	L mm
rhc- 15	6761100	77	$\frac{3}{4}$	18	16
rhc- 40	6761200	77	1	22	19
rhc- 60	6761300	77	$1\frac{1}{4}$	28	22

* Delivery only in a set containing 2 pieces.

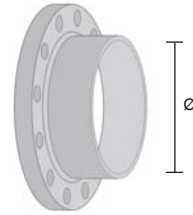


reflex 'longtherm' in a storage charging system for the sanitary water heating



Counter flange - stainless steel*

Flange for type	Article-No.	Product group	DN	Ø mm
rhc- 150	6770200	77	65	76,1
rhc- 200	6770200	77	65	76,1
rhc- 300	6770400	77	100	114,3



Counter flange - steel*

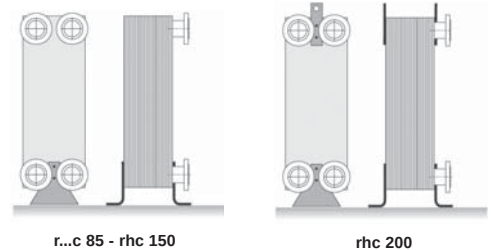
Flange for type	Article-No.	Product group	DN	Ø mm
rhc- 150	6770100	77	65	76,1
rhc- 200	6770100	77	65	76,1
rhc- 300	6770300	77	100	114,3

* Delivery only in a set containing 2 pieces.

reflex 'longterm Holder rc'

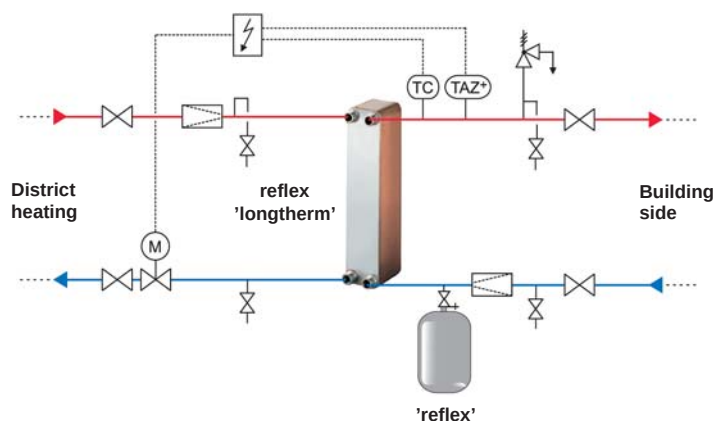
- ▶ stable foot construction is available for size 85 to 200
- ▶ rhc 300 is delivered with foot construction as standard

Type	Article-No.	Product group
r...c- 85	6771100	77
rhc- 150	6771100	77
rhc- 200	6771300	77



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reflex 'longterm' for the system separation in a district heating interconnection point



reflex 'longtherm'

Sizing chart

Tip: You could size your reflex 'longtherm heat exchanger' by downloading this information at www.reflex.de!

Floor heating*		System separation**						Article-No. Thermal insulation
primary secondary		70/50 °C*	70/50 °C*	55/49 °C*	55/40 °C*	80/60 °C**	80/60 °C**	
		40/50 °C	35/45 °C	40/45 °C	30/40 °C	50/70 °C	55/75 °C	
Type Heat exchanger	Article-No. Heat exchanger	Heating capacity						Article-No. Thermal insulation
		kW	kW	kW	kW	kW	kW	
rhc 15/10	6712100	11	8	11	4	---	---	6750000
rhc 15/20	6712200	22	22	22	10	5	---	6750000
rhc 15/30	6712300	32	32	32	15	10	---	6750100
rhc 40/10	6713100	13	13	13	5	11	---	6750200
rhc 40/20	6713200	27	27	27	12	31	4	6750200
rhc 40/30	6713300	40	40	40	19	52	8	6750300
rhc 40/40	6713400	53	53	53	25	73	11	6750300
rhc 40/50	6713500	64	65	65	32	95	15	6750400
rhc 40/60	6713600	75	76	76	37	116	18	6750400
rhc 60/10	6714300	11	11	11	---	19	8	6750500
rhc 60/14	6714400	16	16	16	---	28	14	6750500
rhc 60/20	6714500	23	23	23	10	42	24	6750500
rhc 60/24	6714600	28	28	28	13	52	31	6750500
rhc 60/30	6714700	35	34	35	16	65	41	6750600

Based on maximal pressure loss: 20 kPa (2 mWs)

Potable water heating*		Solar/Potable water heating**				Solar/Swimming pool***		Article-No. Thermal insulation
primary secondary		70/50 °C*	70/25 °C*	65/40 °C*	55/30 °C*	65/40 °C**	40/25 °C***	
		10/60 °C	10/60 °C	10/60 °C	10/50 °C	38 % Glycol 10/60 °C	38 % Glycol 15/25 °C	
Type Heat exchanger	Article-No. Heat exchanger	Heating capacity						Article-No. Thermal insulation
		kW	kW	kW	kW	kW	kW	
rhc 15/20	6712200	14	---	---	---	---	---	6750000
rhc 15/30	6712300	24	---	6	---	---	8	6750100
rhc 40/10	6713100	27	---	7	---	---	9	6750200
rhc 40/20	6713200	54	8	20	11	9	25	6750200
rhc 40/30	6713300	81	14	33	18	16	40	6750300
rhc 40/40	6713400	106	20	47	26	23	53	6750300
rhc 40/50	6713500	129	26	61	33	30	65	6750400
rhc 40/60	6713600	151	32	75	41	37	76	6750400
rhc 60/10	6714300	24	15	29	19	17	10	6750500
rhc 60/14	6714400	33	27	41	33	31	16	6750500
rhc 60/20	6714500	48	45	59	55	51	23	6750500
rhc 60/24	6714600	57	57	71	70	66	28	6750500
rhc 60/30	6714700	71	76	88	90	90	34	6750600

Based on maximal pressure loss: 20 kPa (2 mWs)

District heating								Article-No. Thermal insulation
primary secondary		130/55 °C	130/55 °C	130/60 °C	110/55 °C	110/55 °C	110/60 °C	
		50/90 °C	50/70 °C	55/80 °C	50/90 °C	50/70 °C	55/80 °C	
Type Heat exchanger	Article-No. Heat exchanger	Heating capacity						Article-No. Thermal insulation
		kW	kW	kW	kW	kW	kW	
rhc 15/10	6712100	---	5	3	---	---	---	6750000
rhc 15/20	6712200	4	16	11	---	10	5	6750000
rhc 15/30	6712300	7	27	18	---	16	9	6750100
rhc 40/10	6713100	9	27	21	---	19	11	6750200
rhc 40/20	6713200	27	54	59	10	52	32	6750200
rhc 40/30	6713300	45	80	98	16	83	54	6750300
rhc 40/40	6713400	64	105	136	23	108	76	6750300
rhc 40/50	6713500	83	129	161	30	129	97	6750400
rhc 40/60	6713600	101	150	189	37	150	120	6750400
rhc 60/10	6714300	45	23	29	17	23	29	6750500
rhc 60/14	6714400	67	33	41	30	33	41	6750500
rhc 60/20	6714500	94	47	59	51	47	59	6750500
rhc 60/24	6714600	112	56	71	65	56	70	6750500
rhc 60/30	6714700	140	70	88	84	70	87	6750600

Based on maximal pressure loss: 20 kPa (2 mWs)



reflex 'Buffer tanks'

reflex 'PFH Buffer tank'

- ▶ for storage of heating water
- ▶ incl. 90 mm thick soft PU thermal insulation with white 'PWF Foil coat'
- ▶ max. operating pressure 3 bar; 6 bar for 1500 and 2000 l models / max. operating temperature 95 °C
- ▶ tank inside: black steel / tank outside: durable powder coating (red)

Type	Article-No.	Weight kg	Product group	Ø D1 mm	Ø D2 mm	H mm	Sockets 9x
PFH 200	8500000	51	63	480	660	1500	Rp 1½
PFH 300	8500010	59	63	597	777	1320	Rp 1½
PFH 500	8500020	72	63	597	777	1950	Rp 1½
PFH 800	8500030	124	63	790	970	1825	Rp 1½
PFH 1000	8500040	139	63	790	970	2115	Rp 1½
PFH 1500	8500050	186	63	1000	1180	2120	Rp 1½
PFH 2000	8500060	266	63	1200	1380	2122	Rp 1½

reflex 'PFHF Buffer tank'

- ▶ identical to models 'PFH'
- ▶ with inspection flange for cleaning

Type	Article-No.	Weight kg	Product group	Ø D1 mm	Ø D2 mm	H mm	Sockets 9x
PFHF 300	8500070	62	63	597	777	1320	Rp 1½
PFHF 500	8500080	75	63	597	777	1950	Rp 1½
PFHF 800	8500090	127	63	790	970	1825	Rp 1½
PFHF 1000	8500100	142	63	790	970	2115	Rp 1½
PFHF 1500	8500200	189	63	1000	1180	2120	Rp 1½
PFHF 2000	8500300	269	63	1200	1380	2122	Rp 1½

reflex 'PFHW Buffer tank'

- ▶ identical to models 'PFH'
- ▶ with smooth surface heating coil
- ▶ max. operating pressure 3 bar; 6 bar for 1500 and 2000 l models; heating coil 16 bar
- ▶ max. operating temperature 95 °C; heating coil 110 °C

Type	Article-No.	Weight kg	Product group	Ø D1 mm	Ø D2 mm	H mm	Sockets 9x
PFHW 300	8500400	82	63	597	777	1320	Rp 1½
PFHW 500	8500500	100	63	597	777	1950	Rp 1½
PFHW 800	8500600	197	63	790	970	1825	Rp 1½
PFHW 1000	8500700	225	63	790	970	2115	Rp 1½
PFHW 1500	8500800	272	63	1000	1180	2120	Rp 1½
PFHW 2000	8500900	352	63	1200	1380	2122	Rp 1½

reflex 'PWF Foil coat'

- ▶ other available foil coat colours for reflex 'Buffer tanks'
- ▶ factory-fitted

Type	Article-No.			Product group
	orange	blue	silver	
PWF 200	9119320	9119330	9119340	64
PWF 300	9119321	9119331	9119341	64
PWF 500	9119322	9119332	9119342	64
PWF 800	9119483	9119484	9119485	64
PWF 1000	9119487	9119488	9119489	64
PWF 1500	9119325	9119335	9119345	64
PWF 2000	9119326	9119336	9119346	64



reflex 'Buffer tanks'

reflex 'PH/PHF/PHW Buffer tank'

- ▶ for storage of heating water
- ▶ max. operating pressure 6 bar / max. operating temperature 95 °C
- ▶ tank inside: black steel / tank outside: durable powder coating (red)
- ▶ type 'PHF' with inspection flange for cleaning
- ▶ type 'PHW' with smooth surface heating coil

Type	Article-No.	Weight kg	Product group	Ø D1 mm	Ø D2 mm	H mm	Sockets 9x
PH 3000	7788100	567	63	1500	1680	2101	Rp 2
PH 4000	7788400	674	63	1500	1680	2676	Rp 2
PH 5000	7788700	811	63	1500	1680	3211	Rp 2
PHF 3000	7788200	570	63	1500	1680	2101	Rp 2
PHF 4000	7788500	677	63	1500	1680	2676	Rp 2
PHF 5000	7788800	814	63	1500	1680	3211	Rp 2
PHW 3000	7788300	637	63	1500	1680	2101	Rp 2
PHW 4000	7788600	754	63	1500	1680	2676	Rp 2
PHW 5000	7788900	871	63	1500	1680	3211	Rp 2



reflex 'PW Thermal insulation'

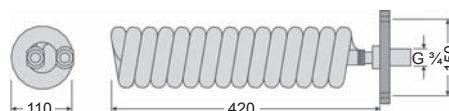
- ▶ for thermal insulation of 'PH, PHF, PHW Buffer tanks'
- ▶ 90 mm thick soft PU thermal insulation
- ▶ incl. white 'PWF Foil coat'

Type	Article-No.	Product group
PW 3000	9119307	64
PW 4000	9119308	64
PW 5000	9119309	64

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reflex 'RWT 1 Ribbed-tube heat exchanger'

- ▶ to connect to an additional heat generator, e.g. or a solar energy system
- ▶ suitable for heating water and glycol mixtures
- ▶ made of ribbed copper tube
- ▶ max. operating pressure 10 bar
- ▶ max. operating temperature 90 °C

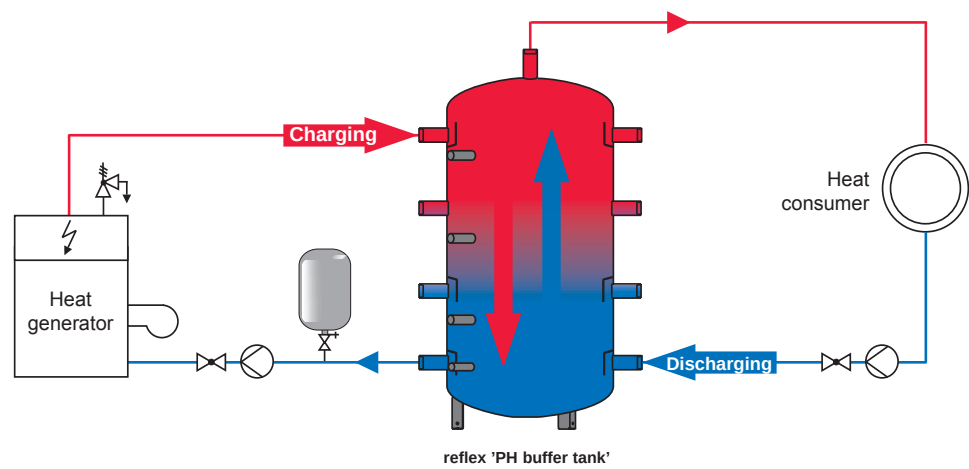


Type	Article-No.	Weight kg	Product group	Power kW	Heating surface m²
RWT 1	7755900	5.5	68	9,0	1,1

reflex

reflex 'Buffer tanks'

Selection



Nominal volume Buffer tank	Q ₂₀ kWh	Q ₃₀ kWh	Q ₄₀ kWh	Q ₅₀ kWh
300	6	9	13	16
500	10	16	21	26
800	17	25	33	42
1000	21	31	42	52
1500	31	47	63	78
2000	42	63	84	105

Available heat capacity in kWh for recharging respectively discharging the buffer tank at temperature differences between flow and return temperature of 20, 30, 40 and 50 K.

The values in the tables are to be regarded as a guide. A precise calculation is performed in collaboration with the designer consultant or the boiler manufacturer.

► Buffer tanks in solar sytems with low to medium solar radiation

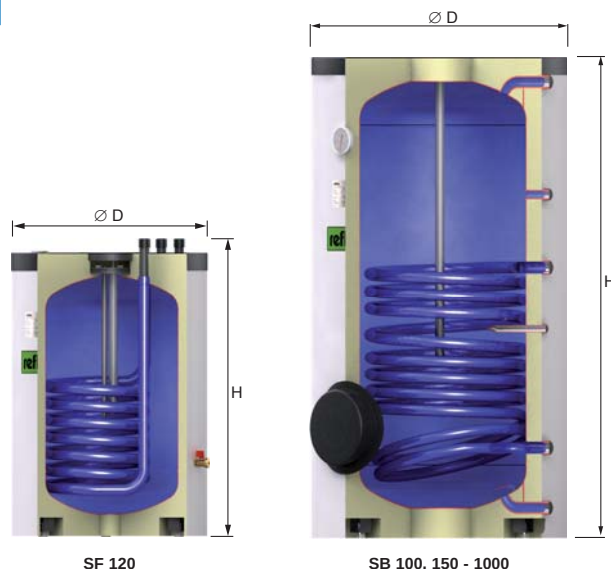
Living space m ²	Collector surface m ²	Buffer tank Litres
70	7 - 14	490 - 980
100	10 - 20	700 - 1400
150	15 - 30	1050 - 2100
200	20 - 40	1400 - 2800
250	25 - 50	1750 - 3500
300	30 - 60	2100 - 4200
350	35 - 70	2450 - 4900
400	40 - 80	2800 - 5600
450	45 - 90	3150 - 6300
500	50 - 100	3500 - 7000



reflex 'Hot water heaters'

reflex 'SB, SF Hot water heaters'

- ▶ floor standing indirect fired water heater
- ▶ heavy duty S235JRG2 (RSt 37-2) quality steel
- ▶ corrosion resistant glass-lined tank according to German DIN 4753
- ▶ magnesium anode rod(s) for tank protection
- ▶ high capacity, low pressure-drop glass-lined heat exchanger
- ▶ factory mounted thermometer
- ▶ extra thick (50-80 mm) PU-foam insulation
- ▶ 'SB' steel jacket in various colours, 'SF' foil jacket in various colours
- ▶ clean-out and inspection access
- ▶ max. operating pressure: 10 bar (tank), 16 bar (coil)
- ▶ max. operating temperature: 95 °C (tank), 110 °C (coil)



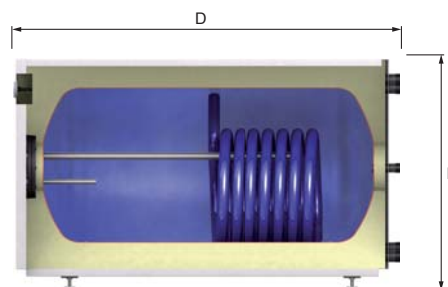
Type	Article-No.				Weight kg	Product group	Ø D mm	H mm
	blue	orange	silver	white				
SB 100	7763000	7763100	7763900	7763800	38	60	512	849
SF 120	---	---	---	7759600	42	60	560	800
SB 150	7750100	7750600	7764100	7763600	54	60	540	1222
SB 200	7750200	7750700	7764200	7763300	65	60	540	1473
SB 300	7750300	7750800	7764300	7763400	99	60	700	1334
SB 400	7750400	7750900	7764400	7763500	119	60	700	1631
SB 500	7750500	7751000	7764500	7763700	170	60	700	1961
SF 750*	---	---	---	7754600	227	60	910 ¹	2000 ¹
SF 1000*	---	---	---	7754700	288	60	1010 ²	2025 ²
SF 1500*	---	---	---	7800700	401	52	1200 ³	2216 ³
SF 2000*	---	---	---	7800800	571	52	1400 ⁴	2126 ⁴

- * - 'SF 750 and 1000' are delivered with 2 built-in anodes
 - PU soft foam jacket (white) will be delivered in a separate package,
 - 'SF 1500 and 2000' are delivered with 1 power anode

- 1) without insulation Ø D = 750 mm, H = 1932 mm
 3) without insulation Ø D = 1000 mm, H = 2019 mm
 2) without insulation Ø D = 850 mm, H = 1959 mm
 4) without insulation Ø D = 1200 mm, H = 2019 mm

reflex 'US Hot water heaters'

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

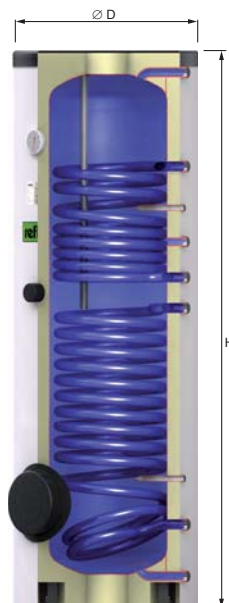


Type	Article-No.				Weight kg	Product group	H mm	D mm
	blue	orange	silver	white				
US 150	7762000	7762100	7765000	7761900	72	62	590	995
US 250	7762500	7762600	7765100	7761300	99	62	644	1095

reflex 'Solar hot water heaters'

reflex 'SB/2, SF/2 Solar hot water heaters'

- ▶ floor standing indirect fired/solar water heater
- ▶ heavy duty S235JRG2 (RSt 37-2) quality steel
- ▶ corrosion resistant glass-lined tank according to German DIN 4753
- ▶ magnesium anode rod(s) for tank protection
- ▶ high capacity, low pressure-drop glass-lined heat exchangers
- ▶ factory mounted thermometer
- ▶ extra thick (50-80 mm) PU-foam insulation
- ▶ opening for an additional electrical heating element
- ▶ 'SB' steel jacket in various colours, 'SF' foil jacket in various colours
- ▶ clean-out and inspection access
- ▶ max. operating pressure:
10 bar (tank), 16 bar (coil)
- ▶ max. operating temperature:
95 °C (tank), 110 °C (coil)



Type	Article-No.					Weight kg	Product group	Ø D mm	H mm
	blue	orange	silver	white	grey				
SF 200/2	---	---	---	7743400	---	72	61	540	1473
SB 300/2	7740500	7760600	7741600	7742200	---	106	61	600	1834
SF 300/2	---	---	---	---	7753300	106	61	700	1334
SB 400/2	7761200	7767100	7742300	7742400	---	130	61	700	1631
SB 500/2	7757000	7740700	7741700	7707500	---	160	61	700	1961
SF 750/2*	---	---	---	7743200	---	217	61	910 ¹	2000 ¹
SF 1000/2*	---	---	---	7743300	---	275	61	1010 ²	2025 ²
SF 1500/2*	---	---	---	7800750	---	495	52	1200 ²	2216 ²
SF 2000/2*	---	---	---	7800850	---	670	52	1400 ²	2126 ²

* PU soft foam jacket (white) will be delivered in a separate package

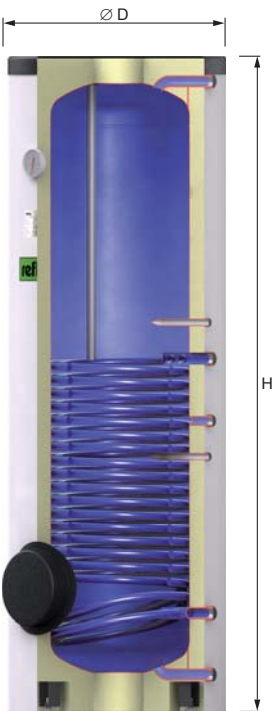
¹⁾ without insulation Ø D = 750 mm, H = 1932 mm

²⁾ without insulation Ø D = 850 mm, H = 1959 mm

reflex 'WPS'

reflex 'WPS Water heater for heat pumps'

- ▶ floor standing indirect fired water heater destined for heat pump applications
- ▶ heavy duty S235JRG2 (RSt 37-2) steel
- ▶ corrosion resistant glass-lined tank according to German DIN 4753
- ▶ great heating surface by means of coil-in-coil construction ensuring best energy transfer performance
- ▶ magnesium anode rod for tank protection
- ▶ factory mounted thermometer
- ▶ extra thick PU-foam insulation with foil jacket in white colour
- ▶ clean-out and inspection access
- ▶ max. operating pressure:
10 bar (tank), 16 bar (coil)
- ▶ max. operating temperature:
95 °C (tank), 110 °C (coil)



Type	Article-No.	Weight	Product	Ø D	H	Heating
	white	kg	group	mm	mm	surface m²
WPS 300	7772300	145	60	700	1334	3.2
WPS 400	7772400	185	60	700	1634	5.0
WPS 500	7772500	235	60	700	1961	5.0

reflex 'VKS Combination tank-in-tank'

- ▶ buffer tank welded-in heating coil and integrated 200 l glass-lined tank for sanitary hot water use
- ▶ corrosion resistant glass-lined tank according to German DIN 4753
- ▶ buffer tank manufactured of steel, externally painted with protective coating
- ▶ high performance heating coil
- ▶ magnesium anode rod for tank protection
- ▶ various pocket tubes at different locations for temperature sensors
- ▶ extra thick PU foam insulation with foil jacket in white colour (delivered in a separate package)
- ▶ max. operating pressure
 - Buffer tank - 3 bar
 - Glass-lined tank - 10 bar
 - Heating coil - 16 bar
- ▶ max. operating temperature
 - Buffer tank - 95 °C
 - Glass-lined tank - 95 °C
 - Heating coil - 110 °C



Type	Article-No. white	Weight kg	Product group	Ø D mm	H mm
VKS 600/200	7774600	178	60	700	1808
VKS 750/200	7774750	200	60	790	1844
VKS 900/200	7774900	214	60	790	2006

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reflex 'VKW Thermal insulation'

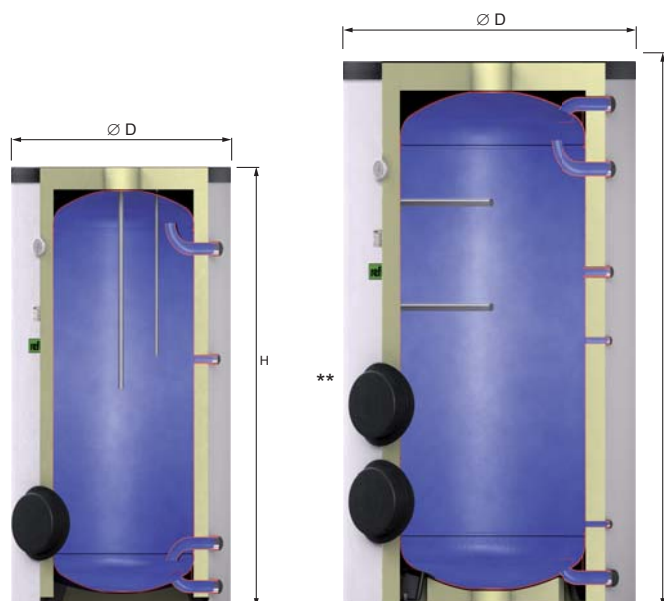
- ▶ for combination with tank-in-tank system 'VKS'
- ▶ 100 mm-thick soft PU-foam insulation foil finish
- ▶ suitable for heating applications only
(for cooling purposes allround insulation to be built on-site)

Type	Article-No. white	Weight kg	Product group	Ø D mm	H mm
VKW 600/200	9118391	13	68	900	1880
VKW 750/200	9118392	15	68	990	1910
VKW 900/200	9118393	18	68	990	2080

reflex 'Hot water storage tanks'

reflex 'LS Hot water storage tanks'

- ▶ storage tank for hot water heating purposes
- ▶ heavy duty S235JRG2 (RSt 37-2) quality steel
- ▶ corrosion resistant glass-lined tank according to German DIN 4753
- ▶ magnesium anode rod for tank protection
- ▶ factory mounted thermometer
- ▶ extra thick (80 mm) PU soft foam insulation (delivered separately)
- ▶ opening for additional electrical heating element(s) (→ kW input capacities on page 63)
- ▶ clean-out and inspection access
- ▶ max. operating pressure: 10 bar
- ▶ max. operating temperature: 95 °C



'LS 300 - 500'

'LS 750 - 3000'

Type	Article-No.	Weight	Product	Ø D	H
	white	kg	group	mm	mm
LS 300	6500500	77	51	600	1834
LS 500	6500600	151	51	700	1961
LS 750*	6500000	182	51	910 ¹	2010 ¹
LS 1000*	6500100	233	51	1010 ²	2035 ²
LS 1500*	6500300	366	52	1200 ³	2215 ³
LS 2000*	6500400	522	52	1400 ⁴	2126 ⁴
LS 3000*	6501200	633	52	1400 ⁴	2876 ⁴

* PU soft foam jacket (white) will be delivered in a separate package
 ** from 'LS 1500' with 2 flanges

- 1) without insulation Ø D = 750 mm, H = 1932 mm
 2) without insulation Ø D = 850 mm, H = 1959 mm
 3) without insulation Ø D = 1000 mm, H = 2122 mm
 4) without insulation Ø D = 1200 mm, H = 2033 mm

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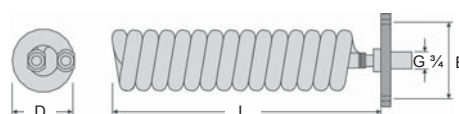
Accessories and spare parts for reflex 'Hot water heaters'

	Article-No.	Product group
* Power anode G ¾ x 400 mm (230 V)	7751300	68
Power anode for 'SF 1500 - 2000', G 1¼ x 800 mm (230 V)	9119365	68
Anode for 100 litres, G 1 x 26 x 420 mm	7751580	68
120 litres, M 8 x 26 x 420 mm	7757400	68
150 litres, G 1 x 26 x 480 mm	7751400	68
200 litres, G 1 x 26 x 550 mm	7751500	68
300 litres, G 1 x 26 x 800 mm	7751510	68
400 litres, G 1 x 26 x 900 mm	7751520	68
500 litres, G 1 x 26 x 1100 mm	7751530	68
750 litres, G 1¼ x 33 x 530 mm (2 pcs. required)	7751540	68
1000 litres, G 1¼ x 33 x 625 mm (2 pcs. required)	7751610	68
750/2 litres, G 1¼ x 33 x 1060 mm	7751570	68
1000/2 litres, G 1¼ x 33 x 1250 mm	7751590	68
** Flexible anode, G 1 x 22 x 1600 mm	7751600	68
Thermometer for pocket tube ½" (bi-metal)	7751200	68
*** Control thermostat	7751100	68

* not for 'SF 120' ** not for 'SF 120', 'SF 750 - 2000', *** not for 'SF 120', 'US 150 - 250', 'US 150 - 250', 'LS 750 - 2000' 'PH, PHF, PHW Buffer tanks'

reflex 'RWT Ribbed-tube heat exchanger'

- ▶ to connect to an additional heat generator, e.g. a fire place or a solar energy system
- ▶ suitable for heating water, district water and solar fluid
- ▶ made of ribbed copper tube
- ▶ max. operating pressure 10 bar
- ▶ max. operating temperature 90 °C

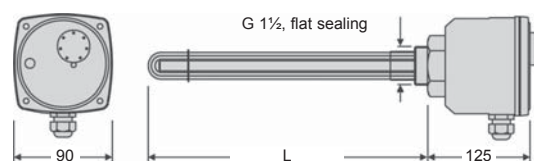


Type	Article-No.	Weight	Product	Power	Heating	B	D	L
		kg	group	kW	surface m²	mm	mm	mm
RWT 1	7755900	5.5	68	9 - 11	1.1	150	110	420
RWT 2	7756300	7.5	68	31 - 39	2.3	225	170	540

reflex 'EEHR Electric screw-in heater'



- ▶ for (additional) heating purposes for reflex 'Hot water heaters', 'Solar hot water heaters', 'Hot water storage tanks'
- ▶ to be used as back-up for space/solar heating; max. water hardness 14 °dH
- ▶ control thermostat up to 95 °C and pilot lamp



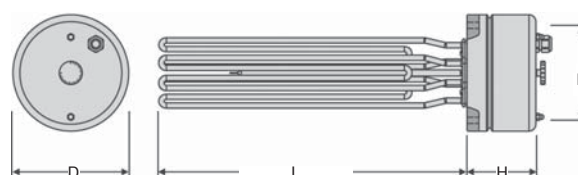
Type	Article-No.	Weight kg	Product group	Storage size/l	Power kW	Voltage V	L mm
EEHR 1,8	9200277	1.75	68	> 100	1.8	230	375
EEHR 2,4	9200278	1.75	68	> 100	2.4	230	375
EEHR 3,0	7755100	1.75	68	> 100	3.0	230	375
EEHR 4,5	7755300	1.85	68	> 300	4.5	400	450
* EEHR 6,0	7755400	1.90	68	> 300	6.0	400	510
EEHR 8,0	7755550	2.20	68	> 750	8.0	400	620
EEHR 10,0	7755600	2.35	68	> 1000	10.0	400	750

* not for 'SB/SF 300/2', Ø 600

reflex 'EFHR Electric flange heater'



- ▶ suitable for continuous operation as electrical heating
- ▶ 3 power levels, reconnectable
- ▶ safety temperature cut-off max. 120 °C
- ▶ control thermostat up to 95 °C
- ▶ on-site electrical connection
- ▶ including flange and sealing



Type	Article-No.	Weight kg	Product group	Storage size/l	Power kW	Voltage V	L mm	B mm	H mm	D mm
EFHR 4,0	9116314	4.7	68	150 - 500	4.0 / 2.7 / 2.0	400	295	150	110	185
EFHR 6,0	9116315	4.8	68	300 - 500	6.0 / 4.0 / 3.0	400	395	150	110	185
* EFHR 8,0	9116316	5.0	68	300 - 500	8.0 / 5.5 / 4.0	400	495	150	110	185
* EFHR 10,0	9116317	5.2	68	300 - 500	10.0 / 6.7 / 5.0	400	495	150	110	185
EFHR 16,0	9116501	10.5	68	750 - 1000	16.0 / 11.0 / 8.0	400	610	225	140	280
EFHR 19,0	9116502	11.0	68	1000 - 2000	19.0 / 12.7 / 9.0	400	740	225	140	280
EFHR 25,0	9115569	11.5	68	1000 - 2000	25.0 / 18.8 / 12.5	400	740	225	140	280

* not for 'SB/SF 300/2', Ø 600, 'WPS 300 - 500'

Flange cap for 'EEHR'

- ▶ for reflex 'Hot water heaters' and 'Hot water storage tanks'
- ▶ Rp 1 1/2 socket for screw-in element 'EEHR'
- ▶ replaces the factory-mounted blank flange of the inspection access
- ▶ gasket ring to be ordered separately

Storage size	Article-No.	Product group
150 - 500	7760000	68
750 - 2000	7760100	68
Sealing		
150 - 500	7760900	68
750 - 2000	7761000	68

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Notes



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