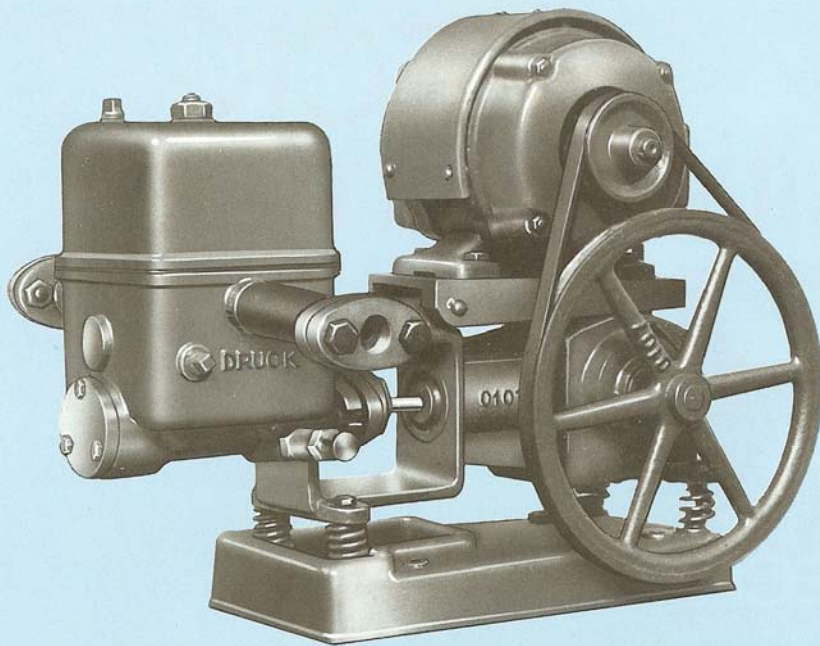


SPECK- Kolbenpumpen

RELIABLE – PROVED –
TECHNICAL PERFECTION



Original Speck
Pumpmeister



One of the very first "Pumpmeister" models

EXPERIENCE

In 1924 SPECK took up production of piston pumps for water supply. Since then, well over one million SPECK »Pumpmeister« and »Büffelpumpe« pumps have been built. The proven reliability of our pumps is the result of accumulated manufacturing skill and experience.

TECHNOLOGY

Tradition must allow for non-stop technical advancement. Our pump components are manufactured using state-of-the-art work stations and CNC computer-operated machinery, keeping in line with the latest technological developments.

QUALITY

The pumps undergo our quality controlling at every stage of their production. After final assembly, each single »Pumpmeister« and »Büffel-pumpe« is tested thoroughly before leaving our works.

ECONOMY

SPECK piston pumps save power. They only require 0.25 kW/h per cubic metre of water. The somewhat higher cost of buying a SPECK piston pump is soon compensated by its low power consumption and, above all, by its exceptionally long service life.



**SPECK
PISTON PUMPS**
for:

**Weekend-Houses Bungalows
Lodges etc.**

**Two Storey
Homes**

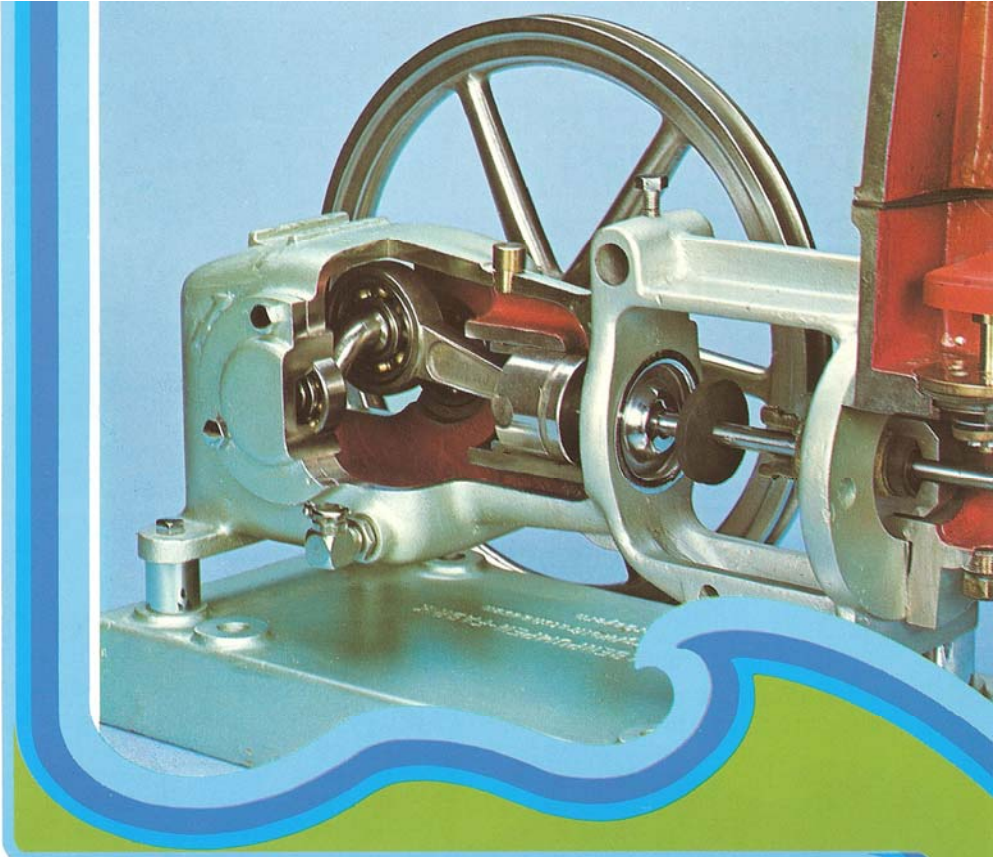
**Booster for
Higher
Buildings**



SPECK »PUMPMEISTER« PM and FPM

Self-priming, vertical suction lift up to 8 metres.
Output up to 3000 litres per hour.
Total head up to 60 metres.
Built-in safety valve tested according to German TÜV* specifications.

Crankshaft drive of proven quality with drop-forged shaft fitted at both ends in noiseless ball bearings.
Doubly-sealed, leak-proof stuffing box.
Pipe connections on valve box not on air chamber.
Suction and discharge sides interchangeable as required.

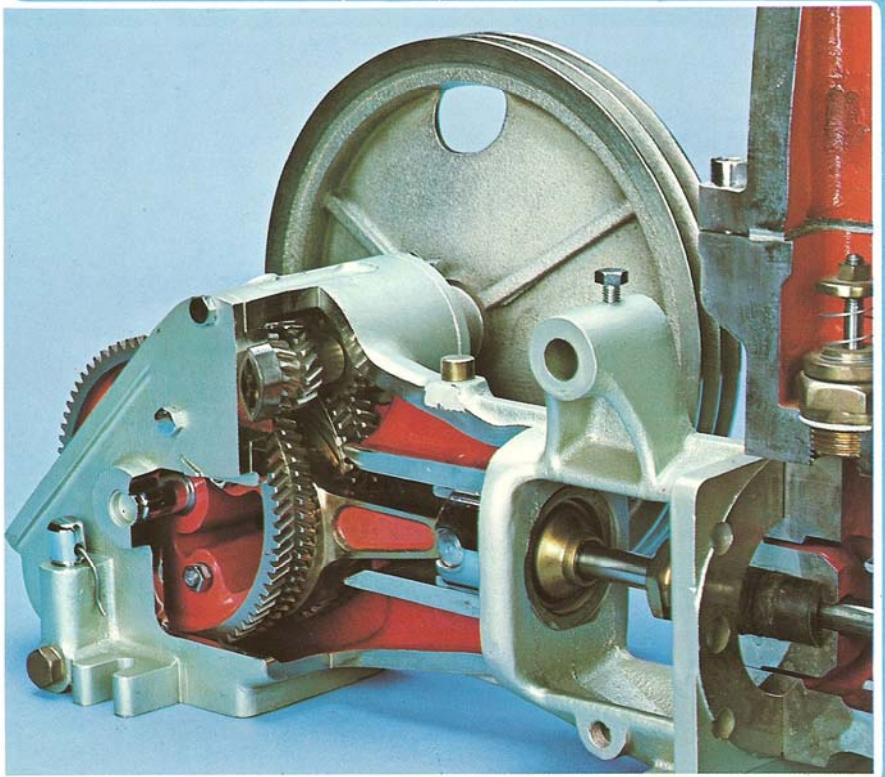


SPECK »BÜFFELPUMPE« BS and S (Duplex)

Self-priming, vertical suction lift up to 8.5 metres.
BS Series:
Output up to 5 cbm per hour
Total head up to 60 m
S Series:
Output up to 45 cbm per hour
Total head up to 60 metres.

Double-helical precision gear of unsurpassable working quietness and length of life.
Double sealed, leak-proof stuffing box.
Pipe connections on valve box and not on air chamber.
Suction and discharge sides interchangeable as required.
Built-in diaphragm safety valve tested according to German TÜV*, on all models up to BS-50. Models S-75 onwards with manually adjustable rotary valve.

* TÜV is the technical control association in Germany.



**Town Water
Supply**

**Agriculture
Farming**

**Smaller
and Larger
Irrigation Systems**

Industry

Navigation



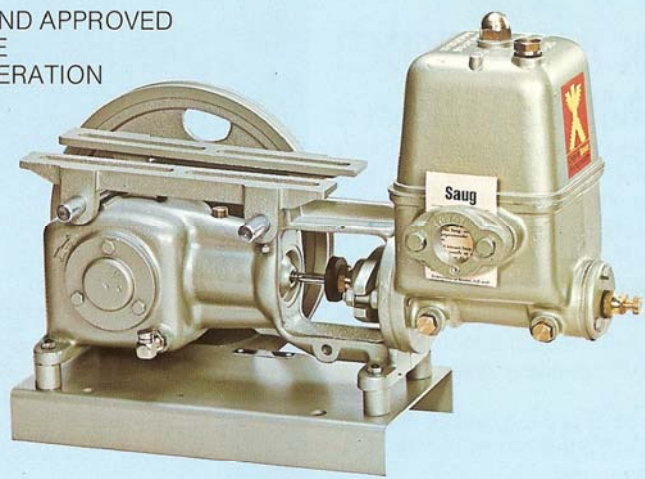
ORIGINAL SPECK »PUMPMEISTER« PISTON PUMPS PM SERIES



Construction:

Casings of cast iron (DIN 1691) drop-forged steel crankshaft, self lubricating, precision polished crosshead in oil, rolled piston rod of stainless steel, compound stuffing box with seal ring, brass or stainless steel cylinder liner, duo piston of Simrit. Easily accessible brass valves and TÜV* tested diaphragm safety valve.

TESTED AND APPROVED
LONG LIFE
QUIET OPERATION



Technical Data

Model		PM 10	PM 15	PM 20	PM 30
Output	l/h	1000	1500	2000	3000
Total Head standard/max.	metre	40/60	40/60	40/60	40/60
Motor performance at total head of 40 m/60 m	kW	0.25/0.25	0.37/0.55	0.37/0.55	0.55/0.75
No. of V-Belts		1	1	2	3
Profile x Inner Length		10 x 875	10 x 875	10 x 950	10 x 1230
Connections: Suction x Pressure	inch	1 x 1	1 x 1	1 1/4 x 1	1 1/4 x 1 1/4
Measurements	approx. cm	52 x 23 x 35	52 x 23 x 37	61 x 24 x 40	70 x 27 x 52
Weight w/o Motor	approx. kg	23	24	33	55

SPECK »PUMPMEISTER« FRESHWATER PUMP UNIT FPM



This freshwater pump unit is an automatic unit for smaller requirements. The large effective capacity of the built-in diaphragm pressure tank assures a constant air-free discharge making air control by means of a snifting valve unnecessary. This compact pump unit is based on the »Pumpmeister« PM 10 and PM 15 models of proven reliability and quality.

AUTOMATIC
READY FOR CONNECTION
COMPACT
POWER SAVING



Technical Data

Model		FPM 80	FPM 100	FPM 150
Output	l/h	800	1000	1500
Total Head	metre	40	40	40
Motor Performance	kW	0.25	0.25	0.25
Switch-On Pressure	bar	2	2	2
Switch-Off Pressure	bar	3.5	3.5	3.5
V-Belts Profile x Inner Length	mm	10 x 875	10 x 875	10 x 875
Connections Suction x Pressure	inch	1 x 1	1 x 1	1 x 1
Measurements	approx. cm	57 x 23 x 68	57 x 23 x 68	57 x 23 x 68
Weight w/o Motor	approx. kg	26	27	27

SPECK PM PUMP UNITS COMPLETE UNITS WITH HORIZONTAL TANKS



The complete unit consists of:
SPECK »PUMPMEISTER« piston pump with anti-charged, insulated rocker, quality three-phase motor 220/380 V, 50 Hz, 1450 r.p.m. Protection No. IP 44, or quality single-phase motor 220 V, 50 Hz, 1450 r.p.m. Protection No. IP 44, V-belt pulleys for pump and motor, V-belts, belt guard and diaphragm safety valve.

Ready for connection, mounted on galvanized, horizontal pressure tanks (operating pressure 4 bar), including automatic air volume control, pressure switch and manometer.
Switch-On Pressure 2 bar
Switch-Off Pressure 3.5 bar

Diaphragm Safety Valve

All »PUMPMEISTER« and »Büffelpumpe« models up to 5,000 litres per hour (PM 10 to PM 30 and BS 15 to BS 50) are fitted with a diaphragm safety valve which is built into the air chamber. These diaphragm safety valves have been tested and approved according to TÜV* specifications.

The safety valve prevents excess pressure in the pump. If it opens, water does not run out of the pump. The over-spill runs back into the suction side.

Automatic Air Volume Control

The automatic air volume control which is built into the pressure tank of the pump unit, provides for the correct proportion of water content and necessary air cushion. It operates maintenance free.

If the water level in the pressure tank rises too much, the automatic air volume control opens, the pump draws air in, and together with the water conveys air into the tank.

The valve of the air volume control shuts as soon as the air cushion has reached its right size.

Pressure Switch

The pressure switch enables automatic switching on and off of the the pump unit, as required.

When the pressure in the tank sinks to switch-on point, the pressure switch automatically activates the motor. The necessary water quantity is automatically conveyed until switch-off pressure is attained. This procedure repeats itself at irregular intervals depending on the size of the tank and the amount of water drawn.

Special Designs (upon request)

The complete pump unit is also available for higher pressure of up to max. 6 bar.

All PM, BS and S piston pumps and pump units are available in salt-water and oilresistant construction.

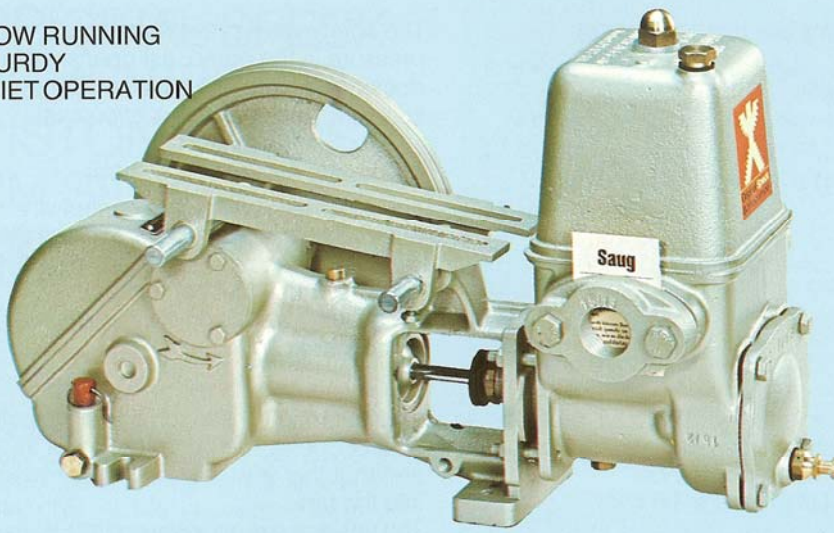
*TÜV is the technical control association in Germany.



Technical Data

Pump Model	Tank Capacity (litres)	Connection Measurements Suction x Pressure (inches)	Output (l/h)	Motor Performance (kW)	Measurements l x w x h (cm approx.)	Weight (kg approx.)
PM 10	100	1 x 1	1000	0.25	88 x 40 x 79	60
	150				105 x 45 x 84	70
PM 15	100	1 x 1	1500	0.37	88 x 40 x 85	61
	150	1 1/4 x 1			105 x 45 x 89	71
	200				107 x 50 x 94	83
PM 20	150	1 x 1	2000	0.37	105 x 45 x 90	80
	200	1 1/4 x 1			107 x 50 x 95	92
	300				140 x 55 x 98	97
PM 30	300	1 1/4 x 1	3000	0.55	140 x 55 x 120	120

SLOW RUNNING
STURDY
QUIET OPERATION



ORIGINAL SPECK »BÜFFELPUMPE« BS SERIES



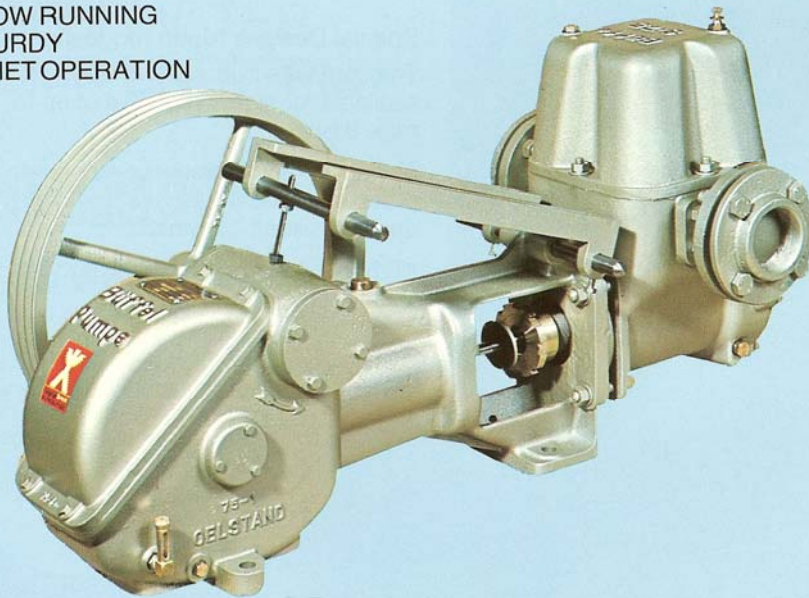
Construction:

Casing of cast iron (DIN 1691), double helical precision gear running in an oil bath, solid bronze connecting rod (DIN 1705). Crosshead in oil, precision polished, rolled piston rod of stainless steel, well sealed stuffing box with seal ring, brass cylinder removable with push-off screws, duo piston of Simrit. Easy accessible brass valves, TÜV tested diaphragm safety valve.

Technical Data

Model		BS 15	BS 25	BS 40	BS 50
Output	l/h	1500	2500	4000	5000
Total Head standard/max.	metre	40/60	40/60	40/60	40/60
Motor performance at total head of 40 m/60 m	kW	0.37/0.55	0.55/0.75	0.75/1.1	1.1/1.5
No. of V-Belts		2	2	2	2
Profile x Inner Length	mm	10 x 820	13 x 975	13 x 1120	17 x 1335
Connections: Suction x Pressure	inch	1 x 1	1 1/4 x 1	1 1/2 x 1 1/4	2 x 1 1/2
Measurements	approx. cm	52 x 22 x 32	66 x 23 x 38	75 x 26 x 42	85 x 36 x 47
Weight w/o Motor	approx. kg	28	46	66	90

SLOW RUNNING
STURDY
QUIET OPERATION



SPECK »BÜFFELPUMPE« S SERIES



Construction:

SPECK »Büffelpumpe« S series are basically the same construction as the BS series except for the fact that they don't have a built-in safety valve.

A centrifugal clutch is necessary if power higher than 3 kW is required and if the pump is switched on and off more often. This lessens the load on the gear parts and motor when starting.

Special designs for use in industry, ship building and for reducing subsoil water, available upon request.

* TÜV is the technical control association in Germany

Technical Data

Model		S 75	S 100	S 150	S 456	
Output 1 *	l/h	7500	10000	15000	25000	40000
Output 2 *	l/h	10000	15000	20000	35000	45000
Total Head standard/max.	metre	40 / 60	40 / 60	40 / 60	40 / 60	40 / 60
Motor performance at total head of 40 m 1*/2*	kW	1.5/2.2	2.2/3.0	3.0/4.0	7.5/7.5	11.0/11.0
total head of 60 m 1*/2*	kW	2.2/3.0	3.0/5.5	4.0/7.5	7.5/11.0	15.0/15.0
No. of V-Belts		2	3	3	3	
Profile x Inner Length	mm	XPZ x 1550	XPZ x 1850	XPZ x 2240	SPA x 2132	
Connections XPZ x eff. length						
Suction x Pressure	inch	2 1/2 x 2	3 x 2 1/2	3 x 3	4 x 4	
Measurements	approx. cm	105 x 46 x 50	125 x 50 x 63	145 x 64 x 72	145 x 64 x 84	
Weight w/o Motor	approx. kg	171	245	410	450	

1* = Standard Output

2* = Maximum Output

Centrifugal clutch necessary for Star-Delta-Switch.

DUPLEX »BÜFFELPUMPE« S SERIES



Construction:

Two S100, S150 or S456 pumps are put together on a base and become S-200, S-300 or S900.

These Duplex pumps have two suction connections and one delivery connection and only need one pump pulley and one driving motor.

Technical data upon request.



EXCELLENT
PERFORMANCE
LONG LIFE
COMPACT

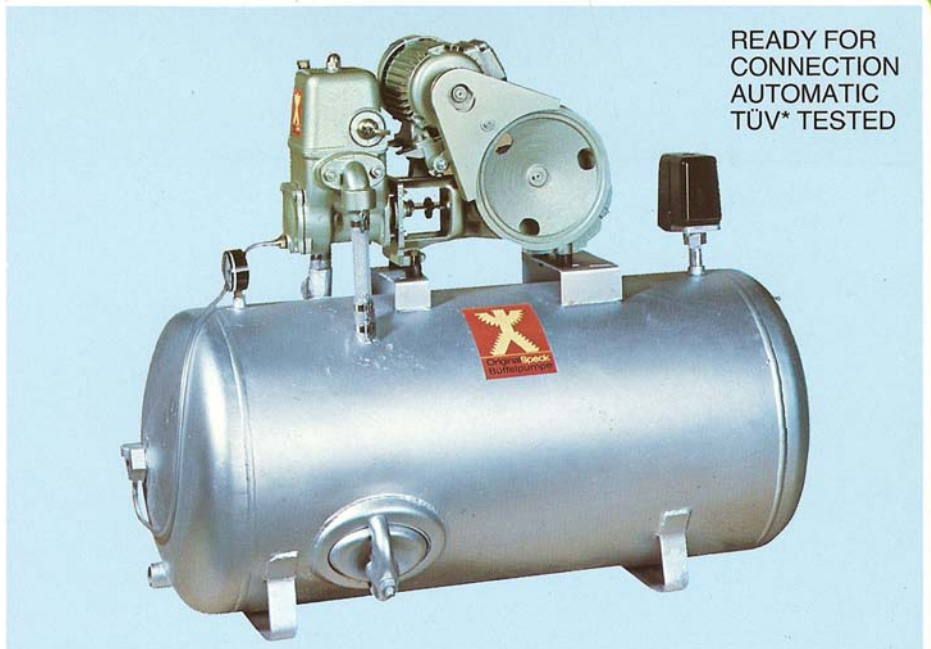
SPECK PUMP UNITS BS SERIES Complete Lay-Out with Horizontal Pressure Tank



Construction:

»Büffelpumpe« pump units with horizontal tank are particularly quiet in operation and have an unsurpassable length of life. The method of construction is similar to the »Pumpmeister« pump units (see page 5). »Büffelpumpe« pump units with vertical pressure tanks for higher performances on page 8.

* TÜV is the technical control association in Germany

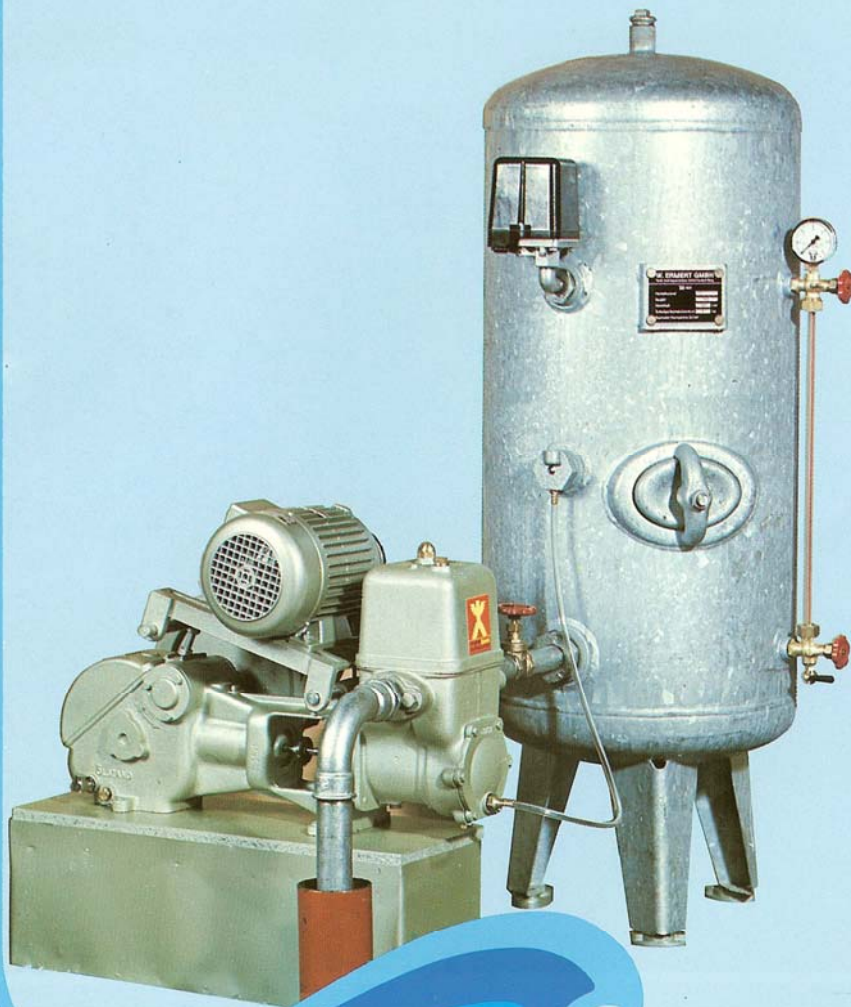


READY FOR
CONNECTION
AUTOMATIC
TÜV* TESTED

Technical Data

Pump Model	Tank Capacity (litres)	Con. Measur. Suction x Pressure (inches)	Output (l/h)	Motor Performance (kW)	Measurements l x w x h (cm approx.)	Weight (kg approx.)
BS 15	150	1 x 1	1500	0.37	105 x 45 x 84	75
	200				107 x 50 x 85	87
	300	1 1/4 x 1			140 x 55 x 96	93
BS 25	200	1 1/4 x 1	2500	0.55	107 x 50 x 100	105
	300				140 x 55 x 110	110

SPECK PUMP UNITS WITH VERTICAL TANK



Horizontal tanks are only available up to 300 litres. If larger performances are required, vertical tanks have to be used together with piston pumps (see illustration left).

The complete lay-out in standard form consists of the following: SPECK piston pump with motor, vertical tank as per German standard DIN 4810 (4 or 6 bar operating pressure), water gauge and automatic air volume control, or for pressure tanks larger than 1000 litres a compressor for air control, pressure switch and a safety valve (which is built in on models up to BS-50).

