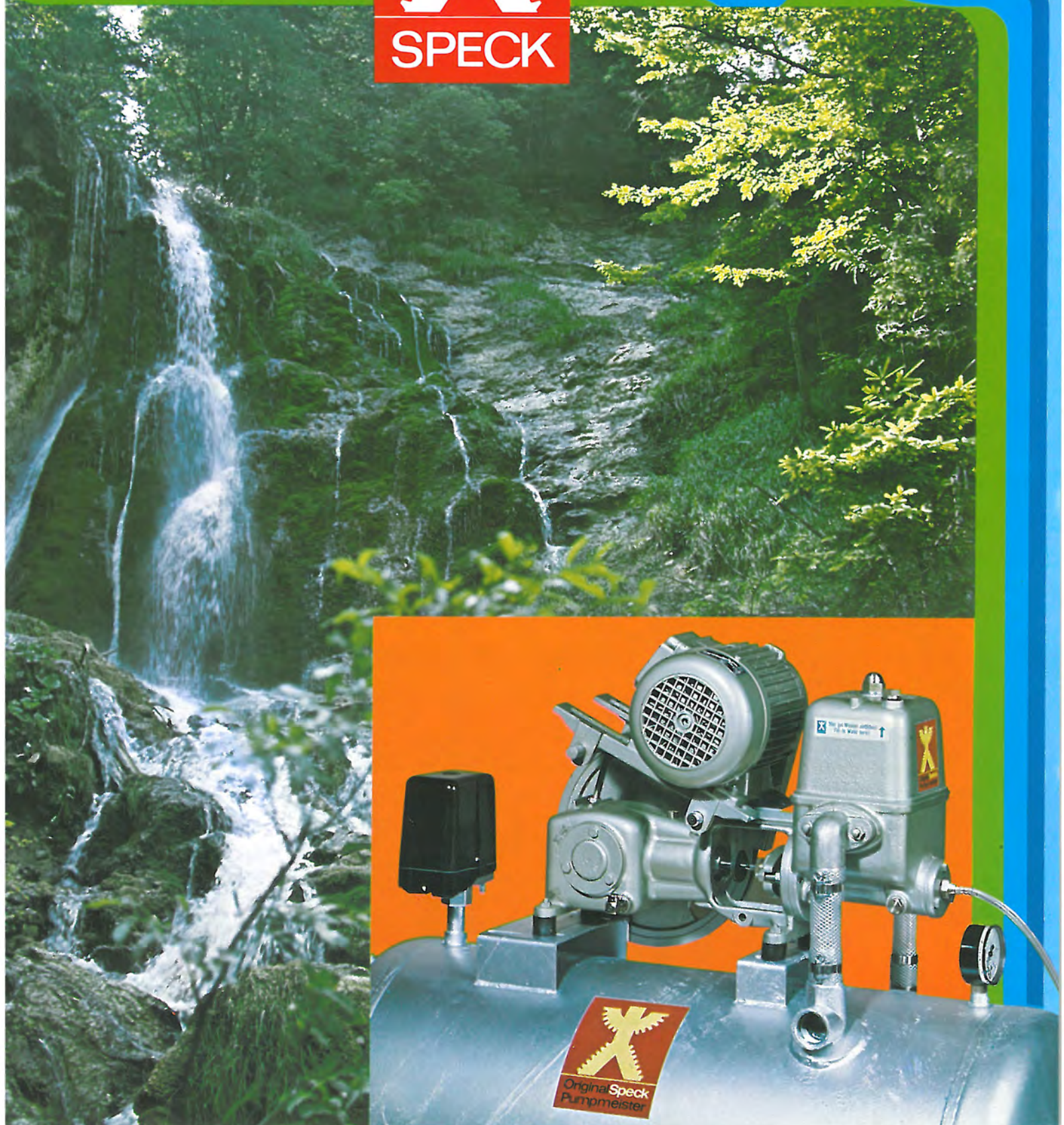
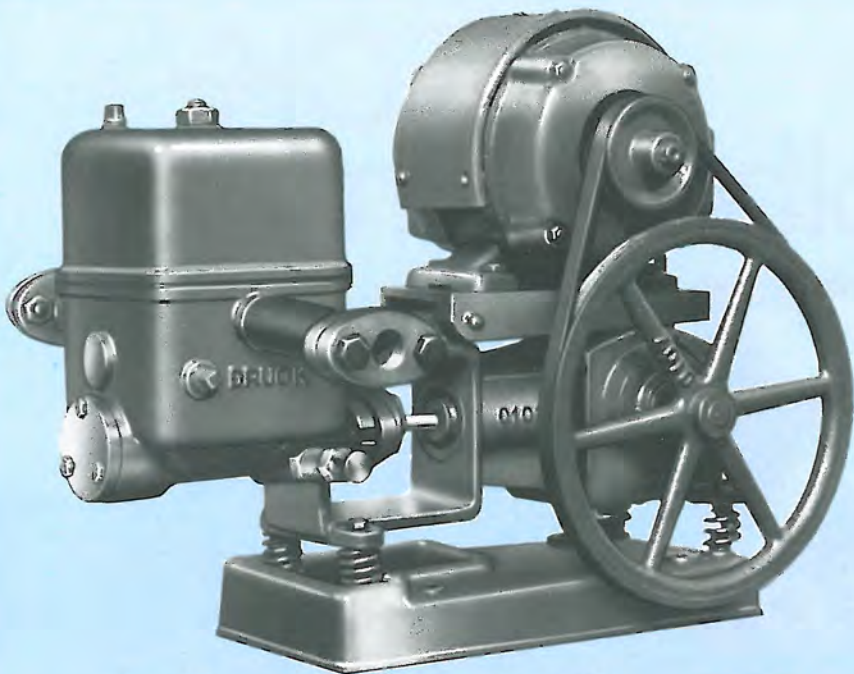


# SPECK- Kolbenpumpen

RELIABLE – PROVED –  
TECHNICAL PERFECTION





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 »Büffelpumpe« 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.

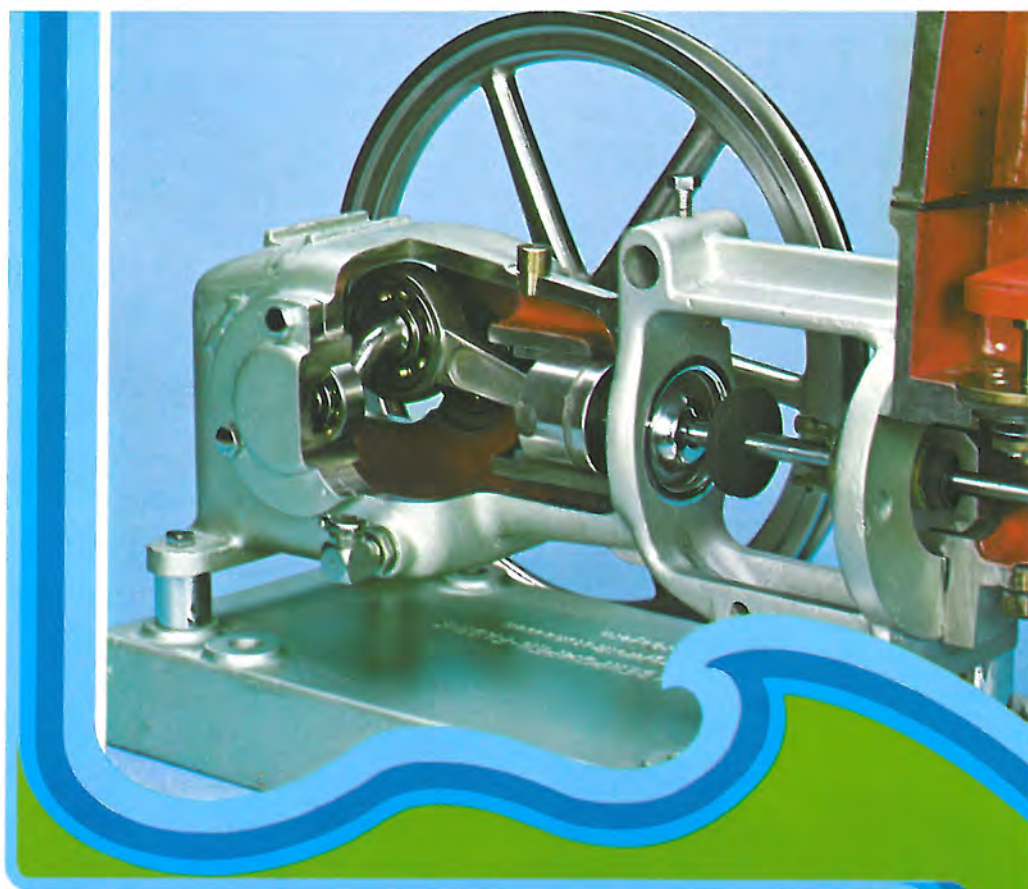
Built-in safety valve tested according to German TÜV\* specifications.

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.

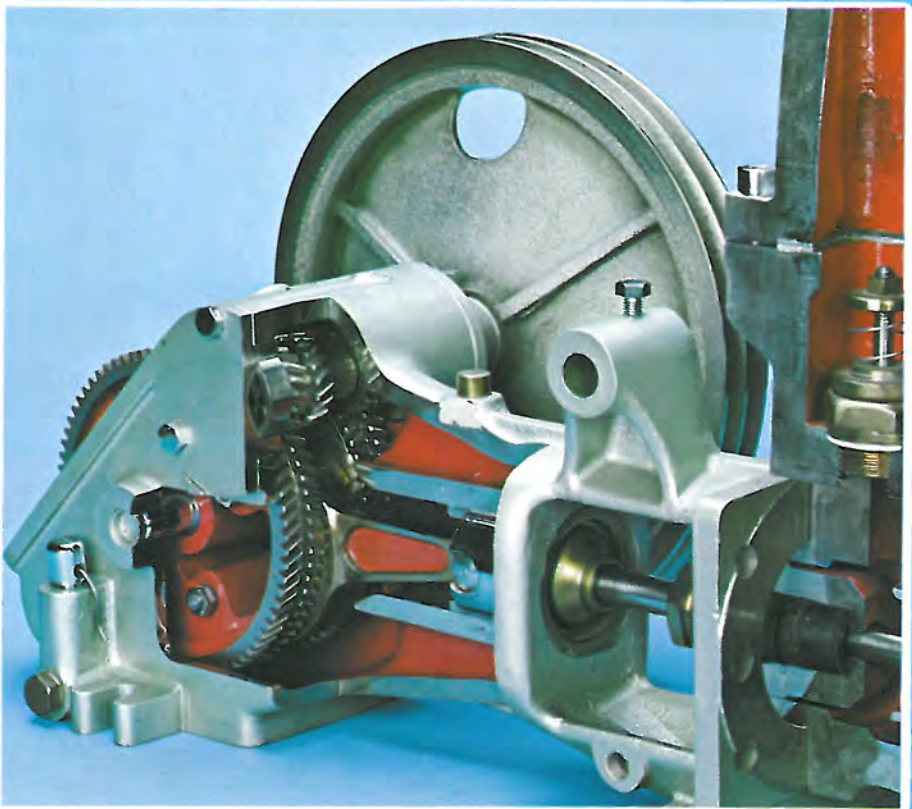
Double sealed, leak-proof stuffing box.

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**



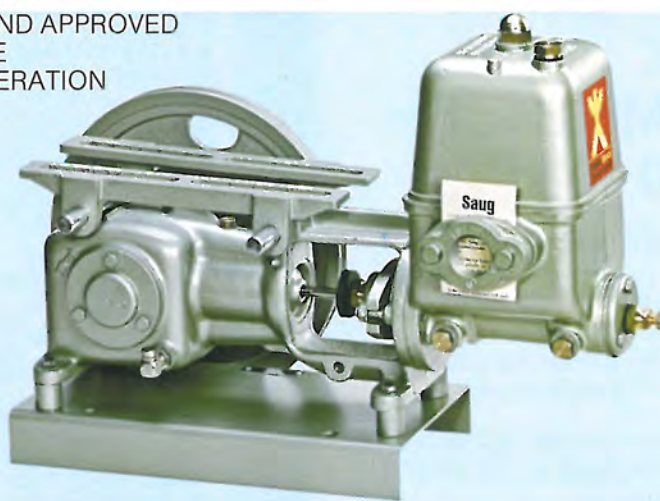
# ORIGINAL SPECK »PUMPMEISTER« PISTON PUMPS PM SERIES



## 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.

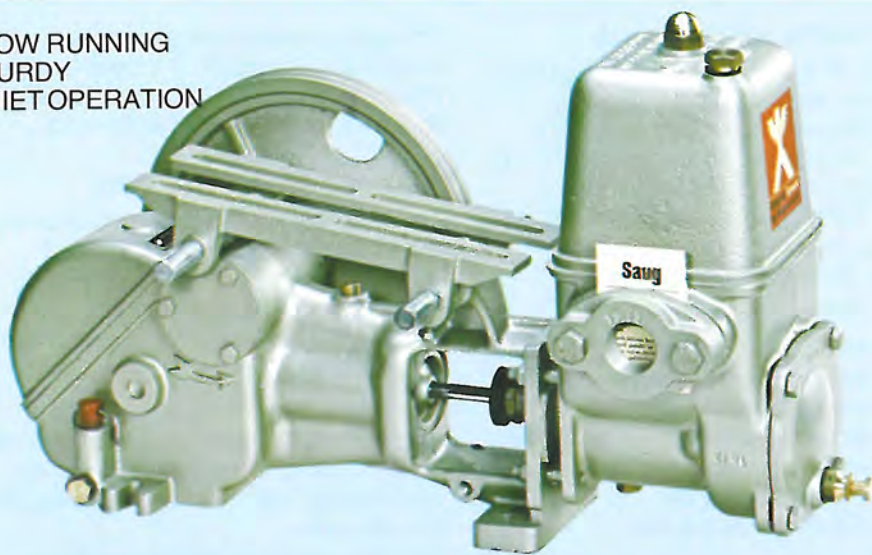
\*TÜV is the technical control association in Germany.



## 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



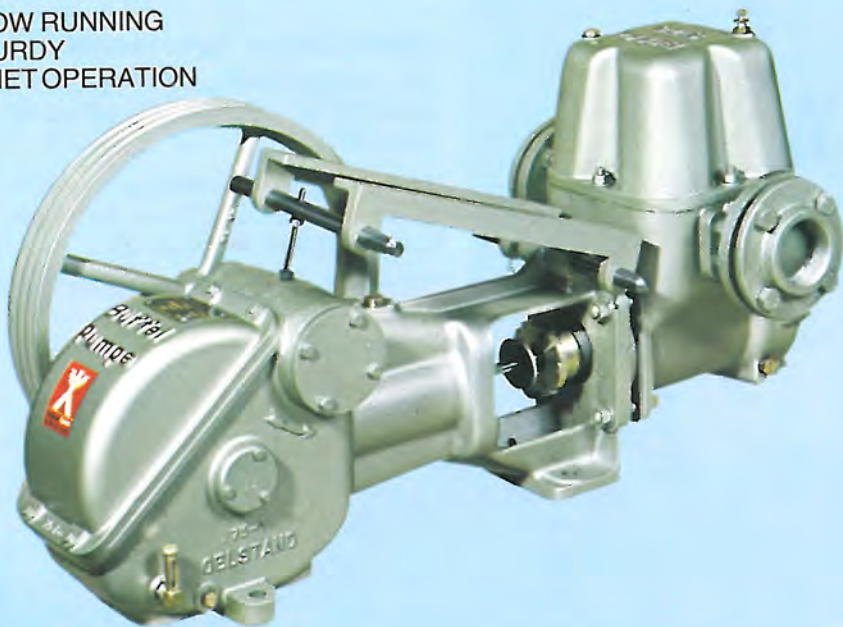
### Construction:

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 40m/60m | 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

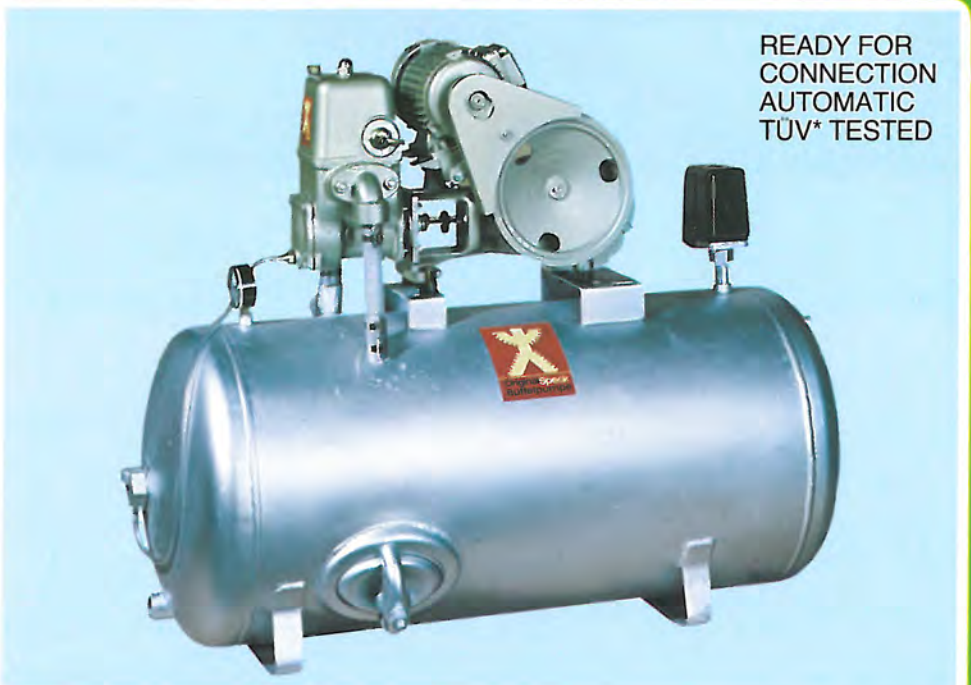
# SPECK PUMP UNITS BS SERIES Complete Lay-Out with Horizontal Pressure Tank



## 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). »Büffel-pumpe« pump units with vertical pressure tanks for higher performances on page 8.

\* TÜV is the technical control association in Germany

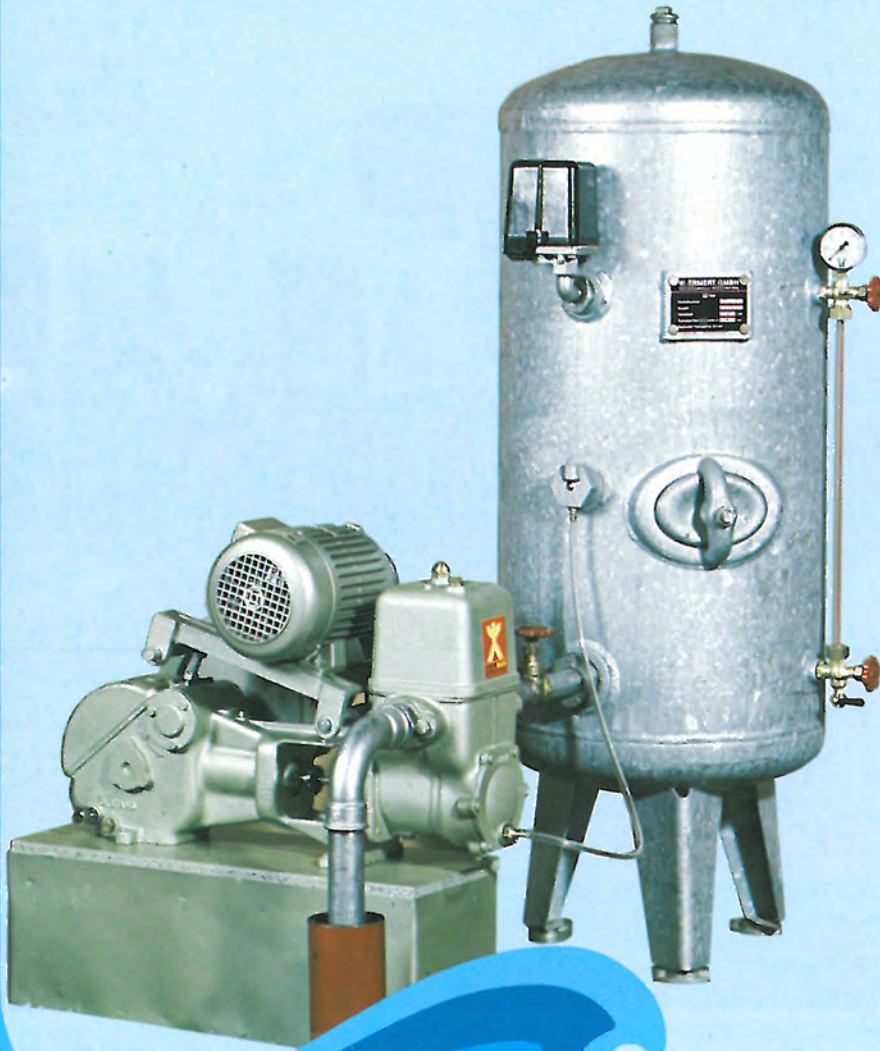


READY FOR  
CONNECTION  
AUTOMATIC  
TÜV\* TESTED

## 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 ¼ x 1                                  |              |                        | 140 x 55 x 96                       | 93                  |
| BS 25      | 200                    | 1 ¼ 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).

