

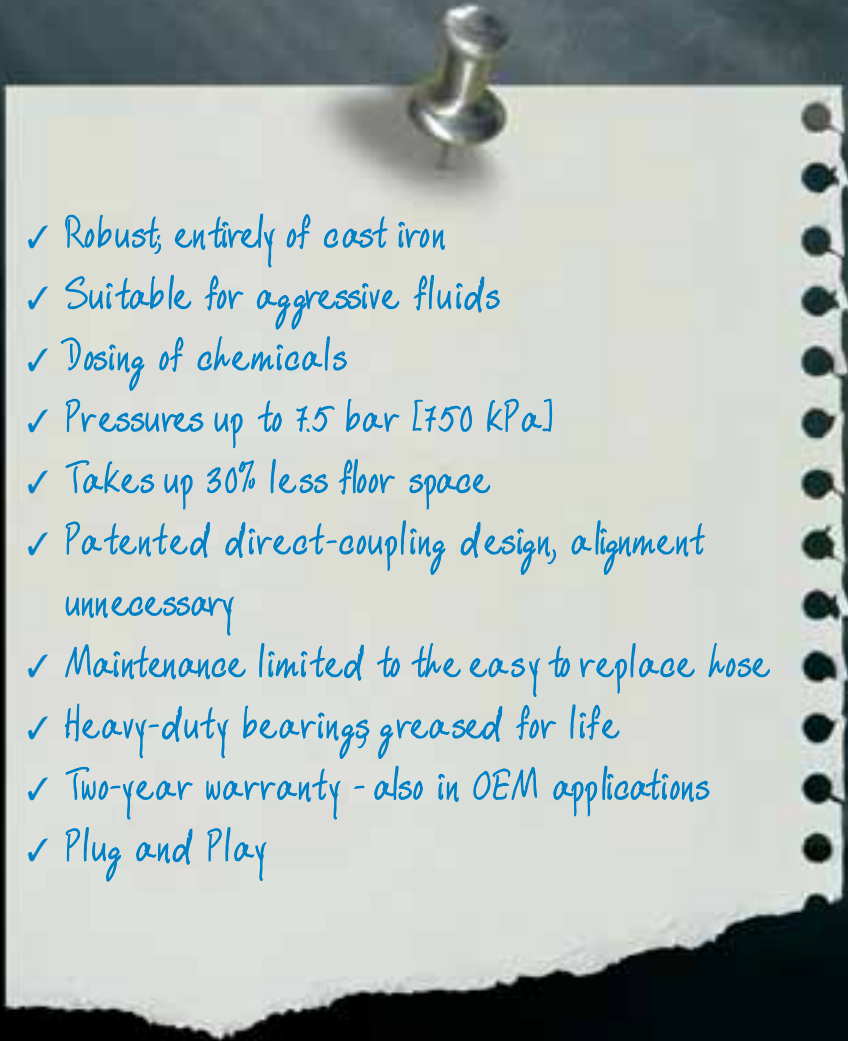
INTRODUCING:

Wild

Thing



Bredel

- 
- ✓ Robust, entirely of cast iron
 - ✓ Suitable for aggressive fluids
 - ✓ Dosing of chemicals
 - ✓ Pressures up to 7.5 bar [750 kPa]
 - ✓ Takes up 30% less floor space
 - ✓ Patented direct-coupling design, alignment unnecessary
 - ✓ Maintenance limited to the easy to replace hose
 - ✓ Heavy-duty bearings greased for life
 - ✓ Two-year warranty - also in OEM applications
 - ✓ Plug and Play

**Bredel's newest industrial heavy-duty hose pumps:
the SPX10 and the SPX15.**



Never underestimate the power of the Wild Thing, the Bredel mini hose pump.

Bredel Hose Pumps - global market leader of hose pumps for heavy-duty industrial applications. Once again the company has improved its range of products. This time with a successful addition to the SPX series in the form of a new generation of smaller hose pumps: the SPX10 and the SPX15, including the extra 20 mm application.

It goes without saying that Bredel has not deviated from the unique, patented, direct-coupled design. Not only has this feature been retained, so have all the other specifications of the world's most reliable pump: the robust cast iron, the exceptional dosing features, the virtually maintenance-free operation, compliance with the industrial EHEDG and ATEX standards, and naturally Bredel's two-year warranty on non wearing parts.

What is new, however, is the ultra-compact construction. With 30% less floor space needed than with long-coupled versions, an improved frame design, a cutting edge surface technique for the rotor component, which makes a wearing ring redundant, a choice of various versions of very stable connections, high corrosion resistance, and an extended life, there can be no question that this is a definite breakthrough!

The SPX10 and SPX15 are suitable for pressures up to 7.5 bar. A solid coupling bush between the rotor and the gearbox is located at the core of the pump. In the pump casing a rotor with integral pressing shoes is mounted on a hub and supported by two bearings. This double sealed and 'greased for life' bearing construction centrally absorbs the forces

released in the pump, which results in the realisation of a quiet and more durable operation of the pump and the drive in comparison with in the market offered close-coupled powered hose pumps. A buffer zone has been installed between pump and drive that protects the bearing constructions of both the gearbox and the pump. The SPX pumps are easy to install and virtually maintenance free. The hose is the only component that will need to be replaced from time to time. And even this maintenance aspect has been greatly reduced due to an improved, stable insert construction.

Once more, Bredel makes a contribution to your productivity with its innovative, small pumps. The new SPX10 and SPX15 pumps simply serve to highlight yet again Bredel's global market leadership.

INDUSTRIAL DOSING AND PUMPING IN A WIDE RANGE OF APPLICATIONS

In all Bredel hose pumps, dosed or pumped fluids only come in contact with the inside of the hose. Costly wearing components like seals, valves, membranes, stators, rotors or glands are not applicable in hose pumps. Bredel hose pumps are pre-eminently suited for processes in which stringent criteria are imposed on the pumping of 'difficult' fluids - abrasive, corrosive, high viscous, shear-sensitive, crystallising or even fluids with a combination of all these properties.

Mining Industry

Dosing aggressive chemicals

Printing Industry

Dosing water-based inks

Building and Cement Industry

Dosing colorants

Wastewater Treatment and

Water Purification Plants

Dosing chemicals and inspection

Wood Industry

Pumping glues

Paint Industry

Pumping abrasive fluids

Breweries

Kieselgur filtering

Grain Industry

Adding chemicals

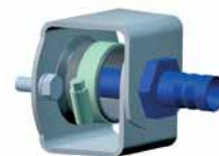
Galvanic Industry

Adding acids and lye

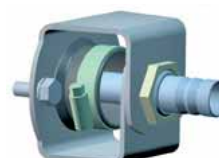
Plastic Industry

Polymers

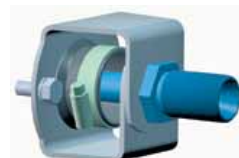
IMPROVED CONNECTIONS



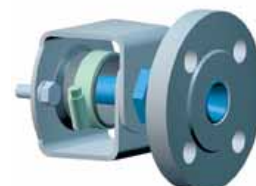
Hose tail SS 316



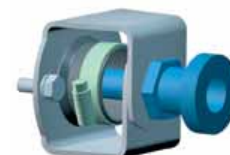
Hose tail PTFE or PVDF



Threaded insert SS 316



Threaded insert with flange (DIN, ANSI/ASA) SS 316



Sanitary connection DIN 11851 SS316. Also available: Tri-clamp and SMS (SS 316)

FEATURES

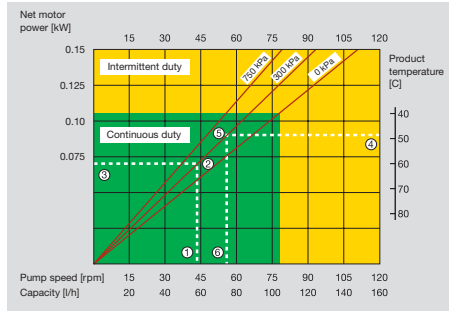
HIGHLY SUITABLE FOR:

- ◆ Shear-sensitive products
- ◆ Abrasive products
- ◆ Viscous products
- ◆ High-density products
- ◆ Vacuum situations
- ◆ Self-priming to 95% vacuum (5 kPa.a.)
- ◆ Can run dry, i.e. can pump without fluid continuously
- ◆ Reversible rotation
- ◆ Can be used as a metering pump: accuracy after 100 hrs: +/- 1%
- ◆ Replacement of hose without dismantling pump
- ◆ Easy to clean: smooth liquid passage without valves, cavities or glands
- ◆ Product pumped does not contact mechanical parts or seals
- ◆ Bearings, 'greased for life'
- ◆ Designed and built for discharge pressures up to 7.5 bar [750 kPa]
- ◆ Low noise level
- ◆ 100% positive flow (no slip)
- ◆ Only one wearing part: the pump hose
- ◆ Easy maintenance, low cost, short downtime
- ◆ Permanent lubrication of pump hose with specially compounded lubricant
- ◆ Many drive systems possible
- ◆ High liquid level control optional
- ◆ Represented all over the world

Bredel

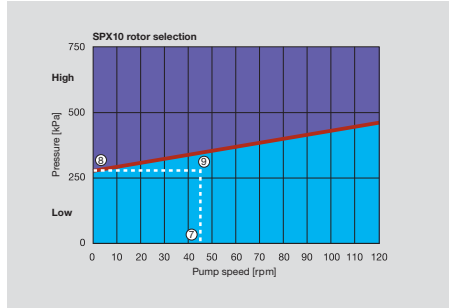
SPX10 WITH A 10 MM HOSE

A



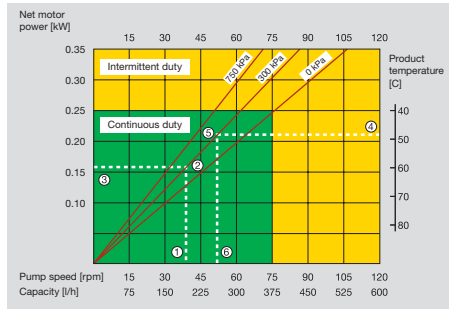
100 kPa = 14.50 psi = 1 bar

B



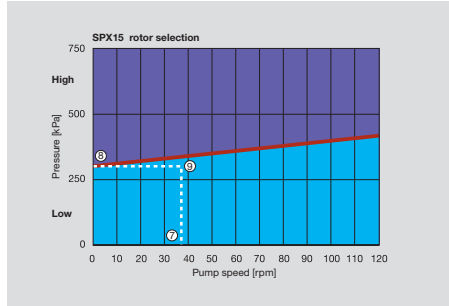
SPX15 WITH A 15 MM HOSE

A



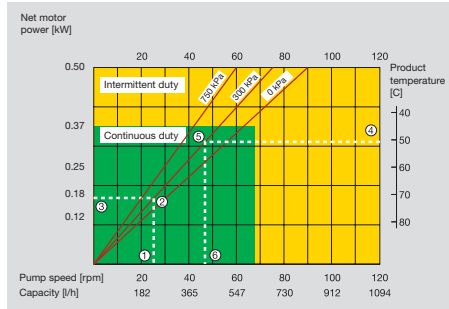
100 kPa = 14.50 psi = 1 bar

B



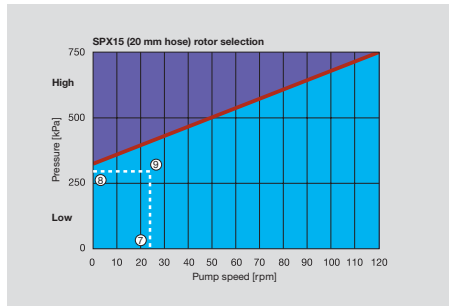
SPX15 WITH A 20 MM HOSE

A



100 kPa = 14.50 psi = 1 bar

B



How to use the curves

SPX10 with a 10 mm hose

Inner diameter pump hose \varnothing 10 mm
 Minimum starting torque 47 Nm
 Capacity per revolution 0.022 l
 Maximum discharge pressure 750 kPa [7.5 bar/110 psi]

SPX15 with a 15 mm hose

Inner diameter pump hose \varnothing 15 mm
 Minimum starting torque 60 Nm
 Capacity per revolution 0.083 l
 Maximum discharge pressure 750 kPa [7.5 bar/110 psi]

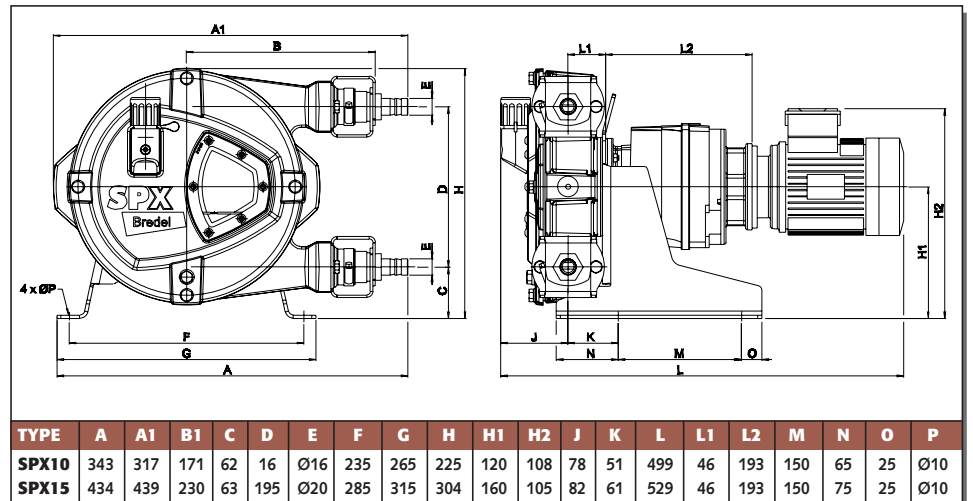
The SPX15 with a 20 mm hose

Inner diameter pump hose \varnothing 20 mm
 Minimum starting torque 85 Nm
 Capacity per revolution 0.152 l
 Maximum discharge pressure 750 kPa [7.5 bar/110 psi]

GRAPH A

Selection of pump size and required motor power.
 Check selection with maximum recommended pump speed in relation to product temperature.

Dimensions of the SPX10 and SPX15.



PRINCIPLE OF OPERATION

A hose made of a special property compound, enclosed within a casing that has connections at both ends. These connections are connected to the suction and discharge lines of the system. Within the casing is a rotor with two integral pressing shoes. The rotor is mounted on a hub and supported with two bearings. As the rotor rotates, the hose is totally compressed by the integral pressing shoes and the product within the hose is pushed forward.

- 1 Flow required indicates pump speed;
- 2 Calculated discharge pressure;
- 3 Net motor power required;
- 4 Product temperature;
- 5 Calculated discharge pressure;
- 6 Maximum recommended pump speed [rpm].

Intermittent duty = 2 hrs max., 1 hr stop.

GRAPH B

Selection of rotor size.
 Determine operating point (rpm/discharge pressure).

- 7 Required pump speed;
- 8 Calculated discharge pressure;
- 9 When operating below the red line the Low pressure rotor is used.

When operating above the red line the High pressure rotor is used.

Remark

With a variable speed drive and operating in both areas, the High pressure rotor should be used.



TYPICAL APPLICATIONS FOR
BREDEL HOSE PUMPS

- **Water and Sewage Treatment**
plants sludge transport, sludge thickening, pit/lagoon emptying, filter press feed, centrifuge feed, digester feed, caustic, lime slurry, flocculants, ferric chloride, activated coal, aluminium sulphate, polymers, magnetite.
- **Chemical Industry**
ferrite slurry, peroxide, latex, resins, hydrochloric acid, battery acid, glue, formaldehyde, sulphuric acid.
- **Food Industry**
milk products, meat products, jellies, marmalade, mayonnaise, salads, tomato paste, dressings, fruit juices, caramel, chocolate, egg yolk, strawberries in yoghurt.
- **Breweries**
yeast, diatomaceous earth, flocculants, stabilizers, filter press feed.

- **Sugar Industry**
sugar syrup, liquid sugar, molasses, glucose slurry, foamed earth.
- **Paper and Ceramic Industry**
clay slurry, china clay, coatings, suspension, talcum suspension, pulp, glue, ink, pigments, kaolin, titanium dioxide.
- **Building Industry**
mortar, foamed mortar, cement grout, bentonite, cement injection.
- **Mining Industry**
nickel slurry, acids, cyanide, grout, coal slurry, pyrite slurry, thickener underflow, drain cleaning.
- **Many other applications such as**
offal, fish waste, potato waste, radio active waste, blood, lye, explosives, pharmaceutical and cosmetic products, toothpaste, soap, detergents.

WHAT MAKES HOSE PUMPS THE
WORLD'S FASTEST GROWING
PUMP TYPE?

- Tens of thousands of pump users know there isn't a more durable and dependable pumping solution than a Bredel high-pressure pump. The simplicity of the pumping principle is unbeatable.
- Simple to install and easy to operate 24 hours a day, 7 days a week. No seals, valves, glands, immersed rotors, stators, pistons, or in-fluid rotating elements risking leaks, blockages, corrosion and wear.
 - Trouble-free pumping of abrasive slurries, corrosive acids, gaseous liquids and shear-sensitive products, or fluids with a high viscosity or a high specific gravity
 - Output is directly proportional to the pump's speed, independent of inlet or discharge

pressure conditions or fluid viscosity, which results in outstanding metering conditions.

- The pump is reversible: the system can easily be pumped out.
- Safe dry-running. The Bredel pump needs no fluid in the hose for cooling or lubrication, and can pump air continuously without damage.
- Self-priming even with an underpressure of 0.95 bar (5 kPa.a.; 0.05 bar a.).
- Hygienic, easy to clean, and virtually maintenance-free.
- No possible contamination of the fluid because it is contained entirely within its hose. No other type of positive displacement pump offers this feature.
- The core of all Bredel pumps is a precision machined hose of natural rubber (NR), EPDM, CSM (Hypalon®) or the internationally approved food grade BUNA N (NBR).

YOUR REPRESENTATIVE

Bredel

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