

Worm pumps from the SP 11 Beliso series

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Models	SP 11 ^{BMR}	SP 11 ^{BUR}	SP 11 ^{BBR}	SP 11 ^{BMB}	SP 11 ^{BMT}
Mixer type	Lifting mixer	Lifting mixer	Lifting mixer	Swivel mixer	Trap mixer
Pump type	2L6	2L6	2L6	2L6	2L6
Delivery rate*	5 - 40 l/ min	7-40 l/ min	5 - 40 l/ min	5 - 40 l/ min	5 - 40 l/ min
Delivery pressure (theor.)*	25 bar				
Delivery width*/ delivery height*	up to 120 m/ 60 m				
Air compressor	2 cylinder compressor, 7 bar, 400 l/ min intake performance				
Diesel engine (Kubota)	water-cooled 3 cylinder (BUR version has 4 cylinders) 15 kW at 2,400 rpm (BUR version has 22.7 kW at 2,600 rpm)				
Mixer volume	150 l	150 l	150 l	150 l	150 l
Weight	750 kg	900 kg	750 kg	750 kg	750 kg
Length excl. towbar	2,170 mm	2,170 mm	2,170 mm	2,590 mm	2,590 mm
Length incl. towbar	3,420 mm	3,510 mm	3,420 mm	3,510 mm	3,510 mm
Width	1,420 mm	1,420 mm	1,420 mm	1,420 mm	1,420 mm
Height	1,150 mm	1,150 mm	1,150 mm	1,237 mm	1,220 mm
Fill level	880 mm	880 mm	880 mm	1,185 mm	1,125 mm
Part no.	111 505.010	111 505.430	111 505.020	111 505.150	111 505.080

* The data is based on experience and depends on the materials used.

■ Standard equipment SP 11^{BMT} (trap mixer)

2 L 6 worm pump, 3-cylinder diesel engine 15 kW, manual speed regulation, high-pressure cleaner, mechanical water metering, dust extraction

■ Standard equipment SP 11^{BMB} (swivel mixer)

Equipment as SP 11^{BMT} version

■ Standard equipment SP 11^{BBR} (lifting mixer)

Equipment as SP 11^{BMT} version, but without dust extraction

■ Standard equipment SP 11^{BMR} (lifting mixer)

2 L 6 worm pump, 3-cylinder diesel engine 15 kW, automatic speed regulation, high-pressure cleaner, electrical water metering, dust extraction, PLC (Programmable Logic Control), mixing time adjuster

■ Standard equipment SP 11^{BUR} (lifting mixer)

Equipment as SP 11^{BMR} version, but with 4-cylinder diesel engine 22,7 kW and manual speed regulation

All versions with 10 m hose and spraying gun, standard tools, vehicle coupling and operating instructions.

■ Additional equipment

- PLC (for BMB and BMT)
- Working light, 12 V, 50 Hz
- Rubber wiper for window mixing blade
- Electric remote control, 12 V on 60 m cable drum (for all models with PLC)
- Vibrating screen
- Radio remote control (for all models with PLC)

■ The Putzmeister Mörtelmaschinen GmbH

is a member of the Putzmeister Group with headquarters in Aichtal near Stuttgart. Since 1958, Putzmeister has been a manufacturer and worldwide supplier of mortar machines, plaster spray and paint pumps, concrete pumps, tunnelling machines, industrial pumps, heavy-duty robotics for cleaning systems and installations, and high-pressure cleaning systems for professional use.

This powerful bond offers sales partners all over the world the ideal conditions with regard to competency, investment security and optimum service in all sectors.



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SP 11 Beliso

The name Beliso represents the latest generation of the familiar SP 11 worm pump series.

They mix, pump and spray site-made and premixed dry mortar up to 6 mm and set new benchmarks in comfort, reliability, safety, ... and design.

Putzmeister

The SP 11 Beliso series – for construction site mixtures and pre-bagged mortar up to 6 mm



2

Putzmeister has been producing its successful worm pumps since 1962. By now, they have become part of thousands of construction sites across the world.

Over time, they have been continuously improved and adapted to meet increasing requirements.

The current Beliso series is at the absolute peak of this worm pump series. These machines have set new standards in operation, comfort, performance and mixing quality.

At the same time, our engineers have made them more compact and lighter.

Together with its modern design, the Beliso series meets all the requirements for a successful continuation of the SP 11's long history.

■ the uses

As typical SP 11 worm pumps by Putzmeister, the „Belisos“ are extremely versatile, too.

They are ideal mixtures processing site made and premixed dry mortar with a grain size of up to 6 mm.

The integrated eccentric worm pumps are suitable for thick and free-flowing media.

As standard, „Belisos“ are fitted with 2L6 type pump parts. This means they are well equipped for all daily tasks. You can then add other pump parts to enable you to use your machine for extraordinary applications, such as self levelling floor screed or injection mortar.

SP 11 worm pumps have achieved this level of success purely because they are consistently oriented towards practical use. Of course, this applies in particular for models in the Beliso series.

■ the hydraulic system

A key advantage is the convenient hydraulic drive. This allows you to adjust the pump volume infinitely so that you always have exactly the delivery volume that you require for the job at hand and can therefore achieve optimal results.

You can operate your SP 11 Beliso by air remote control from the spray gun. This makes you independent of the operator at the machine.

You can use the toggle switch to change from „pump“ to „suction“. For example, this allows you to release the pressure of the hose. All models with integrated PLC (more on page 5) also have another special function. If you stop the pumping process by remote control, the Beliso automatically pumps backwards for a short time. This reduces the pressure in the delivery line and prevents inconvenient dripping on the spray gun.

■ 3 mixer types

SP 11 worm pumps are fitted with a compulsory mixer. There are 3 different types: trap mixer, swivel mixer and lifting mixer.

The special feature of all mixers in the SP 11 Beliso series is that they have barely any blind angles due to their new geometry. The mixer tool collects nearly 100% of the material and thus significantly optimises the mixing quality.

3



SP 11 worm pumps can be used inside and out for all site-made mixes and premixed dry mortar up to 6 mm.

4



They are also extremely suitable for large jobs, as here for the concrete refurbishment of a motorway bridge in Italy.

5



With the appropriate worm parts, you can even pump self levelling floor screed easily and economically.

3

The SP 11 Beliso series – with trap mixer, swivel mixer or lifting mixer

6



The **trap mixer** (SP 11^{BMT}) is the simple, robust and cost-effective variant. This mixer is fixed to the machine. The prepared material flows through a flap in the bottom of the mixer into the hopper of the SP 11.

The **swivel mixer** (SP 11^{BMB}) is rotated around the longitudinal axis of the mixer shaft. As soon as the material mixing process is finished, you simply swivel the mixer out. The material then flows into the hopper. To clean the swivel mixer, simply swing it downwards away from the hopper.

With the **lifting mixer** (SP 11^{BMR} + SP 11^{BUR} + SP 11^{BBR}), all the work is carried out by a hydraulic system. The mixer is mounted on the side of the SP 11. This reduces the fill level to a „back-friendly“ 88 cm. As soon as the mixing process is finished, the hydraulic lift the mixer and tip the mortar into the hopper. It couldn't be easier.

Depending on the mixer type, the type of water metering will differ: automatic by PLC (e.g. on BMR and BUR), mechanically (e.g. on BBR) or simply using a bucket.

■ PLC

With PLC (Programmable Logic Control) all important functions, such as the addition of water (5 - 40 l) and the mixing time can be regulated electronically.

The mixing time can be adjusted infinitely variably between 0 and 10 minutes. Once this time has expired, it switched to intermittent mode. This prevents over-mixing of the mortar.

PLC is a very practical addition to your SP 11 Beliso. It increases its convenience, and also improves the quality of your work.

■ the controls

All operating and control panel that you need to operate your Beliso are positioned centrally and clearly. You always have everything in sight and reach. In addition, a robust flap protects the fittings against dirt and damage.

The complete electrical system is accommodated in the control cabinet where it is protected. This also makes service work easier for you.

■ the plastic hood

Plastic is a versatile, robust and very light material. We have incorporated these advantages in the development of the hood.

With its low weight, the engine cover is really easy to open. To make maintenance work easier, the hood also opens extremely wide. This allows for optimal accessibility to all important areas.

For really high-quality and very smooth paintwork on the hood reduces contamination. And for really tough cases, the Beliso has a built-in 120 bar high-pressure cleaner. You can use this to clean your machine effortlessly in a really short time.

7



Select the right mixer for you from a choice of 3. Here, you can see the robust and cost-effective trap mixer on the BMT variant.

8



The swivel mixer on the BMB version is a more convenient version which makes your work much easier.

9



But it gets even better. BMR models have a lifting mixer, on which a powerful hydraulic system does all the work.

5

The SP 11 Beliso series – full of practical details to make your work easier

10



■ dust extraction

You will certainly be familiar with this annoying issue. You throw the bag of material on the grid on top of the mixer, and seconds later you're standing in a cloud of dust. But that's not the case with the SP 11 Beliso. Here, the dust around the opening of the mixer is automatically extracted. The operator can breathe freely and the machine doesn't get so dirty.

■ the diesel engine

All components used are selected according to their durability, function and weight-saving properties, and are of a high quality. This makes the SP 11 Beliso a very reliable plastering machine.

The high quality of the components ultimately results in very low operating costs.

A good example of this is, the water-cooled Kubota diesel engine. This is series produced and is one of the most reliable engines of its kind. It runs at a maximum speed of just 2,400 rpm, making it significantly quieter and more efficient than its predecessor.

For the versions with a lifting mixer, the speed is also automatically reduced during the spraying breaks. This further reduces consumption and the noise level.

Of course, this is just a sample of the many details offered to you by the Beliso series worm pumps.

You can find out more by contacting your Putzmeister specialist dealer or our field service employees. They will be pleased to help you and show you the machines at work.

■ optional accessories

Mortar hoses:
 ID 25 mm, V 25-40, M 25-40:
 Length 5 m 207 803.000
 Length 10 m 207 804.009
 Length 15 m 211 966.001
 Length 20 m 207 806.007

ID 25 mm, V 25-40+35:
 Length 5 m 207 808.005
 Length 10 m 207 809.004

ID 35 mm, V 35, M 35:
 Length 2 m 070 335.006
 Length 13,3 m 207 615.007
 Length 20 m 209 950.003

ID 35 mm, V 50, M 35:
 Length 13,3 m 207 616.006

ID 50 mm, V 50, M 50:
 Length 13,3 m 501 914
 Length 20 m 501 915

Sponge balls:
 ID 25 mm, ø 30 mm 000 239.004
 ID 35 mm, ø 45 mm 065 044.001
 ID 50 mm, ø 60 mm 000 212.005

Spray gun ID 35 001 306.004
 Fine plaster spray gun ID 25 408 237
 Spray gun ID 25 402 592
 Spray gun, ID 35 with shut-off valve 209 174.009

Collar nozzles:
 ø 18 mm 001 329.007
 ø 20 mm 001 330.009

Rubber fine plaster nozzles:
 ø 8 mm 214 751.006
 ø 10 mm 214 752.005
 ø 12 mm 214 753.004
 ø 14 mm 214 754.003
 ø 16 mm 214 755.002

11



You can control the complete machine from the convenient control panel. A practical flap protects the control panel against dirt and damage.

12



The optional dust extraction is integrated in the mixer grid (SP 11SM).

13



Once your work is finished, you can clean your Beliso with the integrated 120 bar high-pressure cleaner – quickly and efficient.

7