

# BSD-442H

## DESCRIPTION

The Eisele BSD-442H motor pump is **self-priming** up to 7.5 m, even **dry**, even with a **long** suction hose, even when it goes up and down, even against a full discharge line.

This thanks to a simple diaphragm pump, built into the bearing housing.

The bearing housing also contains a large oil chamber that lubricates the shaft seal. This means that the pump is allowed to **RUN DRY** for an unlimited period of time.

The **moderate rotation speed** and **thick, 20 mm wide blades** allow to handle **loaded water**, bentonite with soil, sewage, construction site sludge. On the other hand, the group in the form of a wheelbarrow, with a large lifting bracket, is **very easy to move**.

## SPECIFICATIONS

**Pump** : single stage.

**Impeller** : Open, with three 20 mm wide blades. Diameter 161mm.

**Shaft seal** : Mechanical, with SiC carbide rings in an oversized oil bath. Oil level can be checked without dismantling. Oil SAE 30HD.

**Temperature** of the pumped liquid : Maximum 50°C, short-term 60°C.

**Suction and pressure** : Perrot 3" male quick couplings. Outlet with hemispherical rubber non-return valve. Elbow adjustable over 360°.

**Diesel engine** : Hatz type 1B50, 1 cylinder, 4 stroke, direct injection Bosch **self-bleeding**.

Air-cooled without V-belt, suitable for all climates.

**Dry air filter**.

**Sound level** : 73 db A at 7 m.

**Power** : 3.5 kW, 4.8 cv, 24h/24h, at 1600 rpm.

Gas oil consumption approx. 0.27 l/kW/h. The rotation speed is adjustable downwards. The load through the pump decreases by rpm<sup>3</sup>.

**Gas oil tank** : 5 liters. Possibility to connect a separate tank.

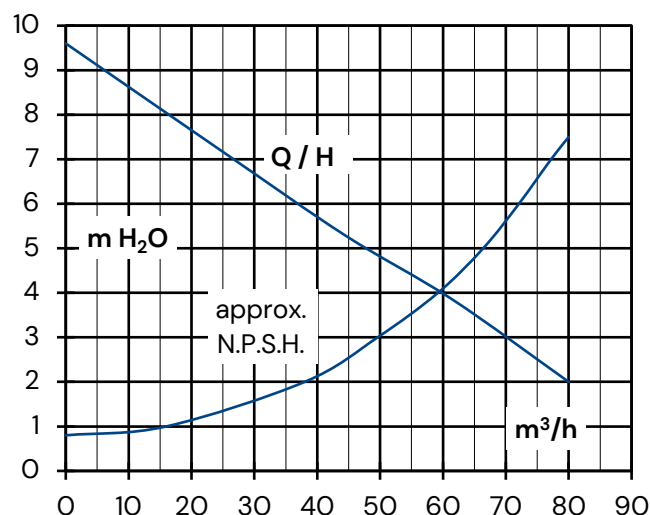
**Oil sump**: max 1.55 l, min 0.77 l, so 100% reserve!

**Start** : **Automatic decompression**.

Self-winding cord. **Automatic over-injection**.

In option: **also electric start** by mounted battery, with sign with starter key, and alarm lamps for battery charging and oil pressure.

## PERFORMANCE



m <sup>3</sup> /h	80	60	37	17
m H <sub>2</sub> O	2	4	6	8

## TECHNICAL DATA

BSD	Ø std.	Q max.	H <sub>man</sub> max	kg
442H	3"	80 m <sup>3</sup> /h	9,6 m	150

## MATERIALS

impeller, pump housing	cast iron GG25
impeller nut and shaft	stainless steel
no aluminium in contact with liquid	

## DIMENSIONS

BSD 442H	length a.o.	width wheels	width arms	height total
	1,45 m	0,6 m	0,65 m	0,75 m



# BSD-442H

---

## DIMENSIONS

Total length: 1.45 m  
Width over wheels: 0.6 m  
Width over arms: 0.65 m  
Total height: 0.75 m  
Suction: 3" (75 mm)  
Pressure: 3" (75 mm), 15° up  
Weight: 150 kg

## ACCESSORIES

These are always available from stock for purchase or rental, such as the pumps themselves:

Suction strainer with large free passage adapted to the blade width, large surface to remain clear for a long time, and hose nozzle extended downwards for low suction. The suction strainer is of the utmost importance to take advantage of the benefits of the Eisele pumps.

Piping: Spiral hoses, lay flat hoses and light hoses with quick couplings are also stocked for purchase and rental. Of all low-pressure mobile pumps, spiral hoses can greatly reduce yield. Pieces of spiral hose at the pump outlet and where kinks can also form are then highly recommended.

## ALTERNATIVES

- version without undercarriage for mounting on truck
- sound-absorbing housing
- explosion-proof electric motor
- electric motor with button operation or with level control
- chassis with large wheels and drawbar
- or on an aggregated trailer
- on a base without wheels
- other connections to suction or pressure

## INSTALLATION

Often one man without a crane is sufficient.

Unlike a submersible pump, the Eisele is placed in an *accessible* place, partly because suction can be carried out along a *long pipe* if necessary.

The suction strainer can be moved.

The basket does not absorb as quickly as a submersible pump and can be hung or wrapped in gauze. In the event of clogging, the impeller and shaft seal can be preserved. The oil chamber is larger and accessible. There is no cable underwater.

## HEIGHT ABOVE WATER

While not a problem for self-priming, cavitation limits the flow rate of centrifugal pumps, the greater the flow rate and suction force. Therefore, please do not count on more than 90%, 80% or 70% of maximum at resp. 2, 3.5, 5 m suction height.

## WARRANTY

One year to our Terms and Conditions. Reservation for change of data. Yield and npsh do not claim the accuracy of ISO 2548 C.

# BSD-942H

## DESCRIPTION

The Eisele BSD-942H pump group is **self-priming** up to 7.5 m, even **dry**, even with an abnormally **long** suction hose, even when this hose runs up and down, and even against a full discharge pipe.

This thanks to a simple diaphragm pump, built into the bearing block.

The bearing block contains a large oil bath that lubricates and cools the shaft seal. This allows the pump to **run DRY indefinitely**.

Pumping **heavily loaded water**, bentonite with soil, sludge or sludge is no problem, partly due to the **thick blades** and the **low speed**.

Furthermore, the group is **easy to move** due to its wheelbarrow shape and wide lifting beam.

## SPECIFICATIONS

**Pump** : single-stage centrifugal.

**Paddle wheel**: open, with three 15 mm wide vanes. Diameter 202mm.

**Shaft seal** : Mechanical, SiC, in large oil bath. SAE 30HD oil.

**Temperature** of pumped liquid : Maximum 50°C, short-term 60°C.

**Suction and pressure** : Quick couplings Perrot 4" male. Check valve outlet with hinged hemispherical rubber flap. 360° adjustable bend.

**Diesel engine** : Hatz type 1D81C, 68 db A, 1 cylinder, four stroke, direct injection. Bosch injection system, **self-bleeding**.

Air cooled, suitable for all climates.

Beltless fan.

**Power** : 6.1 kW, 8.3 hp, 24h/24h. Rpm : 1800, adjustable down. The load decreases like rpm<sup>3</sup>.

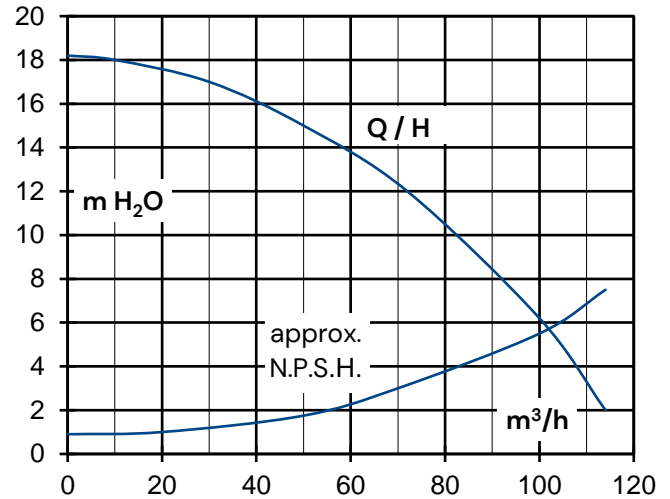
**Gas oil consumption**: approx. 0.3 l/kW/h.

**Gas oil tank** : 21 liters.

**Oil sump** : max/min 1.7/0.8 liters.

**Start** : By crank, or electrically by mounted battery. Automatic over-injection. Decompression lever.

## PERFORMANCE



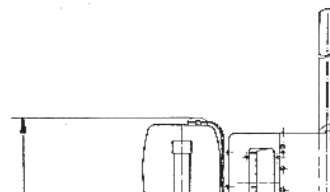
m³/h	114	100	72	50
m H <sub>2</sub> O	2	6	12	15

## TECHNICAL DATA

type	sound at 7 m	m³/h max and m max	weight kg
BSD-942HC Silent	68 db A	114   18	230

## MATERIALS

impeller, pump housing and motor housing	cast iron GG25
impeller nut and shaft	stainless steel
no aluminium in contact with liquid	



# BSD-942H

---

## DIMENSIONS

Total length: 2.18 m  
Total width: 1.13 m  
Chassis width: 0.63 m  
Total height: 1.30 m  
Hook: 0.58 m  
Suction side: 0.68 m  
Pressure side: 1.28 m  
Tire Ø and size: 570x180 mm  
Nominal diameter, suction side: 4" (100 mm)  
Nominal diameter, discharge side: 4" (100 mm)

## ALTERNATIVES

- diesel-powered with crank or electric start
- muted
- electrically driven, explosion-proof, if necessary with start/stop or with float box
- chassis with large pneumatic tires and drawbar
- or on (possibly approved) trailer
- on frame for tank truck or drill train
- other couplings on suction and discharge side

## ACCESSORIES

Like the Eisele pumps themselves, always available from stock for purchase or rental:

**Suction strainer** with optimally large free passage adapted to the pump vane width, with a large surface to remain free for a long time, and with a hose nipple that extends close to the bottom to enable low suction if necessary. **Suction hoses** with couplings. **Spiral hose** for the first 5 m after the pump and elsewhere where there are bends and edges. Flat hose that can be rolled up, also in great lengths.

Reducers.

## INSTALLATION

Often one man without a crane is sufficient.

Unlike a submersible pump, the Eisele is placed in an *accessible* place, partly because it can be sucked along a *long* pipe if necessary.

The suction strainer can be moved.

The basket does not absorb as quickly as a submersible pump and can be hung or wrapped in gauze. In the event of clogging, the impeller and shaft seal can be preserved. The oil chamber is larger and accessible. There is no cable underwater.

## WARRANTY

One year to our Terms and Conditions. Reservation for change of data. Yield and npsH do not claim ISO 2548 C accuracy. the npsH, please count on at most 90%, 80% or 70% at resp. 1.9, 3.5, 5 m suction height, even at low discharge pressure.