



## **Lutz eccentric screw pumps**

**B70H Series** 

# The H stands for horizontal!

The B70H is a variation of our B70V and is designed for the horizontal use on a trolley. It can be used in situations where the B70V comes across space limits or limits of handling and thus completes our range of eccentric screw pumps with a mobile version.

#### Features/Benefits

- **>>** By positioning outside of the container, it is possible to pump liquid out of the stacked containers - or containers which are not accessible from the top
- » Due to the compact construction height, emptying at limited room height is possible
- >> Easy handling of heavy pumps
- » No physical strain due to lifting
- >> Easy replacement of wearing parts by the new rotor/stator combination
- >> On request a fluid transfer is possible in either direction











Optional with stainless steel trolley with normal or conductive wheels. In conjunction with a flow meter and operating unit, a mobile filling station is created.

## For mobile and stationary application

### Easy change of size

- Changing between different stator materials is possible with the same stator sleeve.
- A conversion from 25.1 to 75.1 is possible by replacing the stator sleeve.
- The pump tube and shaft are always the same length and compatible with each rotor/stator unit.
- By replacing stator, rotor and stator sleeve, a conversion to any rotor/stator combination is possible.

## **Liquid examples**

Lutz horizontal eccentric screw pumps are suitable for pumping aqueous to highly viscous Newtonian and non-Newtonian media. The pumps are suitable for abrasive, solids containing and shear sensitive media, as well as for neutral, aggressive and easy flammable liquids under high delivery pressure.



# **Lutz eccentric screw pumps**

## B70H 25.1 and 75.1

Productdetail	Pump tube		B70H	
	Size		25.1	75.1
	Seal Mecha	anical seal (MS)	MS	MS
	Drive shaft Unive	ersal joint shaft (UJ)	UJ	UJ
	Flow rate*	up to I/min.	25	75
	Delivery head*	up to bar	8	8
	Temperature of me	edium** max. °C	140	140
	Material outer tube	2	1.4571/1.4404	1.4571/1.4404
N.E	Pressure joint	Tri-Clamp	DN 50	DN 50
	Weight	kg	5.5	6.5
	Length	mm	400	500
	Stator PTFE (T max. 140 °C)	Order no.	0176-401	0176-404
	* Determined with wat	iter at 20 °C, three-phase motor (900	1/min) and elastomer stator	

- With stator PTFE (for explosion-proof eccentric screw pumps B70H, the temperature of the pumped medium must not exceed 100 °C)
- Explosion-proof eccentric screw pump approved category 2 (according to ATEX) for pumping flammable liquids of the explosion group IIA and IIB. Temperature class T4 at  $40^{\circ}$ C ambient temperature or temperature class T3 at  $60^{\circ}$ C ambient temperature. Please note: Mechanical seal which is independent from rotating direction on request



#### **Motor selection**

Motors with cable terminal box	
Version	1.5 kW, 900 1/min.
Protection type/weight	IP 55, 32 kg
Order No.	0176-803

Motors with protection switch	
Version	1.5 kW, 900 1/min.
Protection type/weight	IP 55, 32 kg
Order No	0476 006

Motor, explosion-proof		
Version	0.95 kW, 900 1/min.	
Marking	II 2 G Ex e II T3	
Protection type/weight	IP 55, 21 kg	
Order No.	0176-805	

Motors with frequency converter		
Version	1.5 kW, 0-900 1/min.	
Protection type/weight	IP 55, 35 kg	
Order No.	0176-804	

Three-phase 230/400 V, 50 Hz, energy efficiency category IE 3 in accordance with EU Regulations 640/2009 and 04/2014. Special tension, frequency, protection types as well as increased ex-protection classes on request.

## For viscosities of 100.000 mPas

### Materials (coming into contact with the pumped medium):

Version:	B70H 25.1	B70H 75.1
Housing:	Stainless steel (1.4571/1.4404)	Stainless steel (1.4571/1.4404)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals*:	FPM	FPM
Mechanical seal*:	Carbon/CrMo-casting, FPM	Carbon/CrMo-casting, FPM
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator materials:	PTFE	PTFE



Pump tube with stator in PTFE is also available in PURE version. Special application in the food and cosmetics industry as well as in the pharmaceutics.

Other sealing materials on request

#### Important info

Range of viscosity aqueous up to flowability limit.
Liquid table with examples of liquids see resistance table.



#### Productdetail

#### **Specification**

#### Order No.



#### Trolley for horizontal eccentric screw pump B70H

For mobile use of B70. With fixing material to assemble the motor.

Material: Stainless steel (1.4571)
Dimensions trolley 820 x 520 x 940 mm

Trolley 0208-194

Trolley with electrically conductive wheels 0208-195 ●

Additional price trolley for ex motor protection switch

(Order motor protection switch separately)





#### Motor protective switch for motor B70H

Explosion proof according to EEx de IIC T6 with thermal and electromagnetic trip, protection type IP 66.

Ex, 2.5 - 4.0 A for B70H (Ex) **0335-419** 

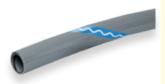


#### PVC spiral hose, fabric reinforced

Hose for food liquids made of PVC, with woven layer and imbedded galvanized steel helix, inside and outside smooth, complies with EU-regulations 10/2011 and 1935/2004.

Operating pressure: max. 14 bar
Temperature of liquid: -5 up to +65 °C
Nominal diameter: Weight:
DN 38 (1 1/2") 1.15 kg/m

DN 38 (1 1/2") 1.15 kg/m **0374-469** DN 50 (2") 1.60 kg/m **0374-470** 



#### Universal chemical hose

Colour coding: "blue/white/blue".

Suitable for food and luxury foodstuffs, pharmaceuticals, cosmetics and hygiene products Conform to FDA and USP class VI. Complies with EU-regulations 10/2011 and 1935/2004. Internal finish: UPE light with spiraled OHM conductive stripes UPE black, smooth, non-bleeding, abrasion-resistant.

Intermediate layer: EPDM conductive complies with the requirements of the recommendation XXI category 2 of the BfR and FDA standards.

External finish: EPDM light grey, conductive, non-bleeding, ozone- and UV resistant, hardly flammable, (starting from DN 25 with galvanized steel helix, suitable as suction and pressure hose).

Electrically conductive: Type  $\Omega/T$  (<10 $^6$  Ohm between the fittings, <10 $^9$  Ohm through the hose wall) according to DIN EN 12115:2011.

Operating pressure: max. 16 bar

Temperature of liquid: -30 up to +100 °C (dependant on the liquid),

can be sterilized at 130°C for 30 minutes (open system)

 Nominal diameter:
 Weight:

 DN 38 (1 1/2")
 1.2 kg/m

 DN 50 (2")
 1.9 kg/m

0374-478

0374-479

Suitabe for transferring flammable and easy flammable liquids (e.g. Ethanol, petrol) or in explosive hazard area.

**Specification** Order No. Product detail

#### **Hose clips**

Stainless steel hose clips with threaded screw for fixing hoses of various nominal bore at the hose connection.

Nominal diameter:



#### Hose connection with Tri-clamp

For connecting the hose to the eccentric screw pump B70, discharge spout or Tri-Clamp armatures (comprising a hose connection, locking clamp and seal)
Material: Stainless steel (1.4404)

 Connection:
 for hose nominal diameter:
 Seal:

 Tri-Clamp DN 50
 DN 38 (1 1/2")
 FPM
 0204-878

 Tri-Clamp DN 50
 DN 50 (2")
 FPM
 0204-880



#### Please note:

The assembler is responsible for the professional fixing of the hose according to the current Pressure Equipment Directive.

#### Hose connector with Tri-clamp

For connection of conductive hose onto the eccentric screw pump B70, discharge spout or Tri-Clamp armatures in explosive hazardous area. The hose connector ensures a highly conduction transition between conductive hose and pump/armature.

The ohmic resistance between the armatures must be lower than 10° Ohm. (Consisting of hose connector, clamp collars, locking clamp and seal) Material: Stainless steel (1.4404)

Connection: for hose Nominal diameter: Seal: Tri-Clamp DN 50 DN 50 (2") FPM



0204-869

Further accessories can be found in our eccentric screw pump leaflet or on request.







## Lutz Pumpen GmbH

Erlenstraße 5-7 D-97877 Wertheim Phone: +49 93 42 / 8 79-0

Phone: +49 93 42 / 8 79-0 Fax: +49 93 42 / 87 94 04 E-Mail: info@lutz-pumpen.de