

Lutz Stainless Steel Pump Tube

For flammable and aggressive liquids



Picture shows:
Pump tube with motor Silver Star ME I 6

Sealless (MSL) or with Mechanical Seal (MMS)

Applications

The robust Lutz pump tube with mechanical seal or sealless is suitable for pumping clean and dirty, thin-bodied and slightly viscous, aggressive and non-aggressive, flammable and non-flammable liquids out of drums and small or large containers.
The pump tube is non-lubricated, thus preventing contamination of the liquids pumped.

Structure and function (MMS-SS)

Lutz pump tubes are immersible centrifugal pumps.
The drive shaft of this pump tube is sealed by a single-acting mechanical seal (MS) and two shaft seals located behind it, making a robust sealing system. The pump tube must not be allowed to run dry.

Structure and function (MSL-SS)

Lutz pump tubes are immersible centrifugal pumps.
The drive shaft of this pump is not sealed. The bearing housing insert above the impeller is designed to prevent the pumped liquid from rising between the shaft and the inner tube. This insert guides the liquid which penetrates between the drive shaft and the shaft bearing back into the container being drained.

Length:

MMS/MSL: 27", 39", 47"
MSL only: 55", 59", 63", 67", 78"
Special length on request.



The pump tube is "Zone 0" approved in combination with the original Lutz motors Silver Star / MD-1 / MD-2 in accordance with standards for use in hazardous locations.

Note:

Axial-flow rotor for high delivery rate and low delivery head. Radial-flow impeller for low delivery rate and high delivery head.

For correct bonding and grounding see page 13.

Type	MMS-SS (Mechanical Seal)	MSL-SS (Sealless)
Wetted parts		
Housing:	Stainless Steel (316 Ti)	Stainless Steel (316 Ti)
Seals:	Viton®	None
Mechanical seal:	Carbon, Ceramic, Viton®, Stainless Steel (316 Ti)	None
Bearings:	Carbon	Carbon
Drive shaft:	Stainless Steel (316 Ti)	Stainless Steel (316 Ti)
Examples of liquids:	Gasoline, thin-bodied Oils, Solvents, Chlorine Carbon Hydrogens, Alcohols, Amines, Benzoles, Phenoles, Toluol, Xylol, Fruit Juices, Paints and Inks, Vegetable Oils etc.	Alcohols, Aceton, Acetonitrile, Acetates, Ether, Diethanolamine, Freon, Frigen, Methylene Chloride, Dimethyl Phthalate, Dioxane, Diethylamine, Pyridine etc.
Type of impeller:	axial-flow rotor (R) or radial-flow impeller (L) Material: ETFE	axial-flow rotor (R) or radial-flow impeller (L) Material: ETFE

For performance information see page 6 & 7

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Lutz Hastelloy C Pump Tube

For extremely corrosive applications

SL-HC Sealless

Applications

The robust Lutz pump tube is suitable for pumping nearly all kinds of liquids, whether extremely aggressive or flammable, clean or dirty, thin-bodied or slightly viscous out of drums and small or large containers

Structure and function (SL-HC)

Lutz pump tubes are immersible centrifugal pumps.

The drive shaft of this pump is not sealed. The bearing housing insert above the impeller is designed to prevent the pumped liquid from rising between the shaft and the inner tube.

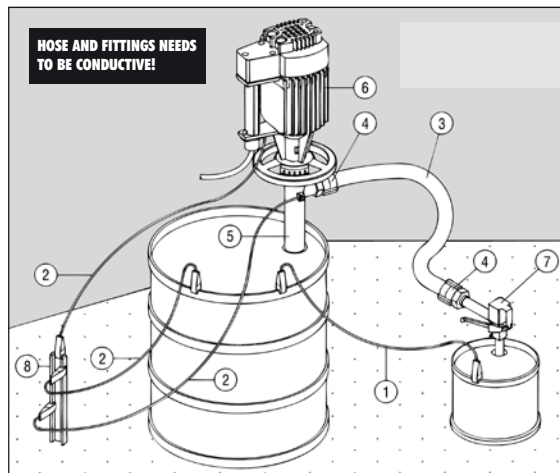
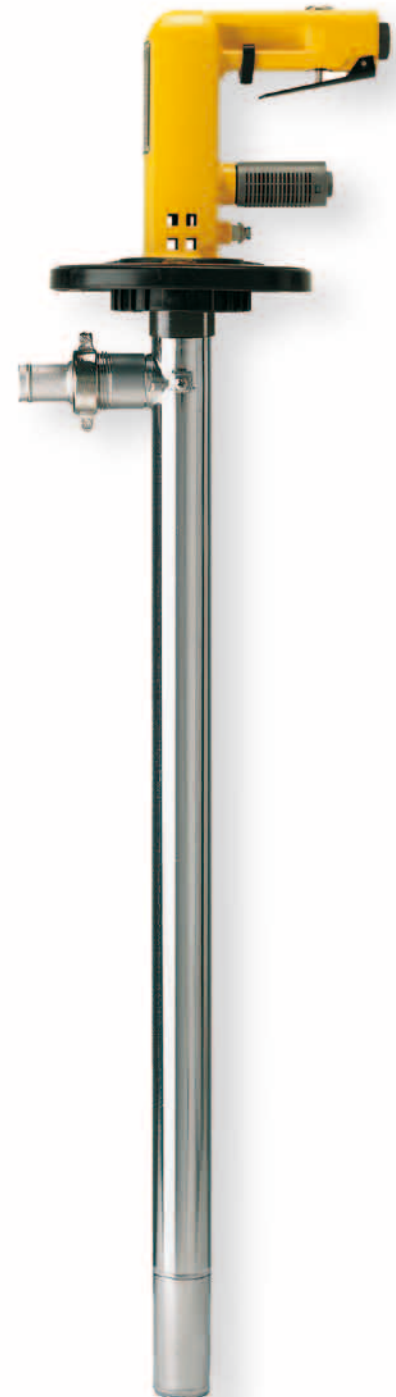
This insert guides the liquid which penetrates between the drive shaft and the shaft bearing back into the container being drained.

Length:

39", 47", Special length on request.



The pump tube is "Zone 0" approved in combination with the original Lutz motors Silver Star / MD-1 / MD-2 in accordance with standards for use in hazardous locations.



*Zone "0": Defines a constant hazardous explosive atmosphere. Covers interior of drum/container used for storing or transporting of explosive liquids. Equipment approved for zone "0" must be specially tested and certified.

Required accessories when using explosion proof pumps in hazardous locations.

Explosion proof plug and socket outlets, bonding and grounding cable, conductive hoses and nozzles in Stainless Steel. Ex-Motor (ME I, MD-1, MD-2)

Bonding and Grounding Diagram

- ① Bonding wire
- ② Ground wire
- ③ Conductive hose, (10⁶ Ohm)
- ④ Conductive fitting of the hose into hose connector
- ⑤ Metal pump tube for zone "0" in Stainless Steel or Hastelloy "C"
- ⑥ Explosion proof motor ME I / MD-1 / MD-2
- ⑦ Nozzle in Stainless Steel
- ⑧ Grounding rod

Type	SL-HC (Sealless)
Wetted parts	
Housing:	HC-4 (2.4610)
Seals:	Viton®
Mechanical seal:	None
Bearings:	ETFE, Carbon
Drive shaft:	HC-4 (2.4610)
Examples of liquids:	Bromine, Chlorosulphonic Acid, Butylchloride, Chlorine Water and nearly all kinds of liquids
Type of impeller:	axial-flow rotor (R) or radial-flow impeller (L), Material: ETFE

For performance information see page 6 & 7

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Picture shows:

Pump tube with air motor MD-2

Lutz MP Pump Tube in PP and Stainless Steel

For mixing and pumping of emulsions and suspensions

MP-PP / MP-SS Mechanical Seal

Applications

The Lutz mixing pump tube is designed to be used in any situation where it is necessary to mix and pump in a single operation.

The relatively small pump tube diameter of 50 mm (Polypropylene) and 41 mm (Stainless Steel) also makes the unit ideal for use in narrow-necked containers or in drums with a 2" bunghole.

The rate of flow, viscosity and density of the medium determine the mixing intensity and the delivery rate of the mixing pump tube.

Experience has shown that the mixture quantity should preferably not exceed 55 Gallons if the medium is thin-bodied.

The drive shaft of this pump tube is sealed by a single-acting mechanical seal (MS) above the impeller, making a robust sealing system. The pump tube must not be allowed to run dry.

The pump tube is non-lubricated, thus preventing contamination of the liquids pumped.

Length:

39", 47"

Special length on request.



Warning:

The mixing pump tube in Polypropylene (PP) **must not** be used for flammable liquids.



The mixing pump tube in Stainless Steel is "Zone 0" approved in combination with the original Lutz motors Silver Star / MD-1 / MD-2 in accordance with standards for use in hazardous locations.

For correct bonding and grounding see page 13.

Type	MP MS-PP (Mechanical Seal)	MP SL-PP (Sealless)	MP MS-SS (Mechanical Seal)
Wetted parts			
Housing:	PP	PP	Stainless Steel (316 Ti)
Seals:	—	—	FEP coated
Mechanical seal:	Carbon, SiC, Viton®, HC	—	Ceramic, PTFE, Stainless Steel (316 Ti)
Bearings:	ETFE/PTFE	ETFE/PTFE	Carbon
Drive shaft:	Stainless Steel (316 Ti)	Stainless Steel (316 Ti) optional HC-4 (2.4610)	Stainless Steel (316 Ti)
Examples of liquids:	Chemical, pharmaceutical and metalworking industries, in food production, in printing works, in car repair workshops and in painting/decorating firms.		
Type of impeller:	radial-flow impeller (L)	radial-flow impeller (L)	axial-flow rotor (R)
Material:	PP	PP	ETFE

For performance information see page 6 & 7

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Picture shows:

Mixing pump tube with motor Silver Star ME I 6