

# B70V 12.1 and 25.1

for viscosities from 1 - 100,000 mPas

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

Version:	B70V 12.1/25.1	B70V 25.1 Steel	B70V HD 12.1/25.1	B70V PURE 12.1/25.1
Housing:	SS (1.4571)	galvanized steel	SS (1.4571)	SS (1.4571)
Rotor:	SS (1.4571)	soft-nitrided steel	SS (1.4571)	SS (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)	FPM (Viton®)	FPM (Viton®) or EPDM
Mechanical seal:	Carbon/CrMo-casting, Viton® (optional SiC/SiC, Viton®)	Carbon/CrMo-casting, Viton® (optional SiC/SiC, Viton®)	WC/WC/EPDM	WC/SiC/FKM-FDA or EPDM-FDA
Packing gland:	PTFE Soft packing safe for use with food-stuffs	-	-	-
Drive shaft:	SS (1.4571)	galvanized steel	SS (1.4571)	SS (1.4571)
Stator material:	NBR light, Viton®, PTFE	NBR light, Viton®, PTFE	PTFE	PTFE

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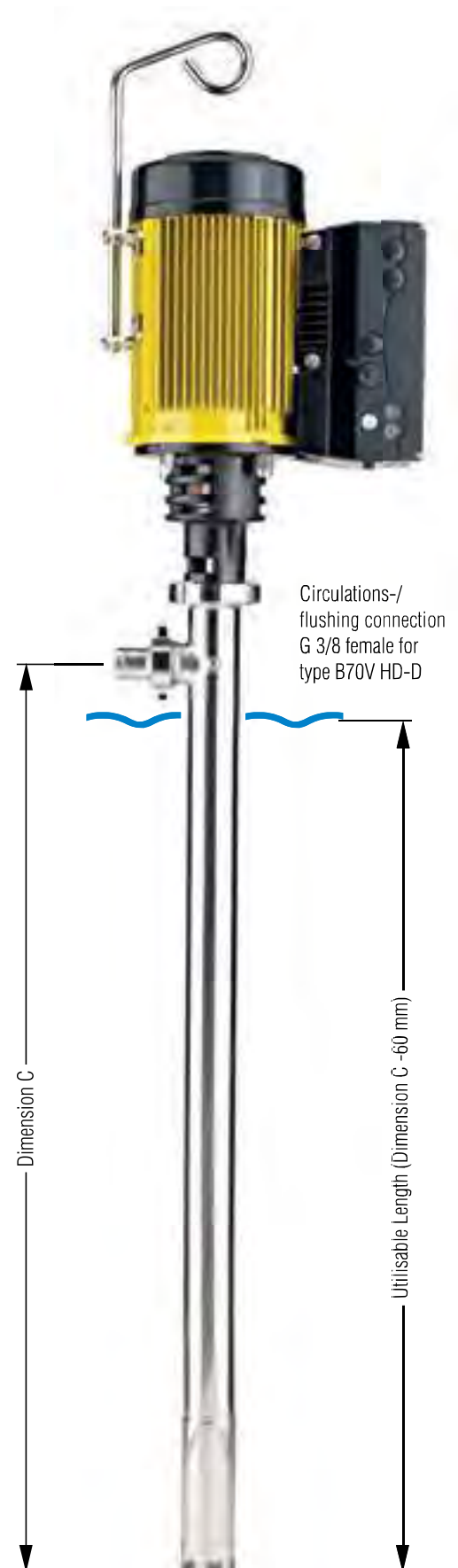
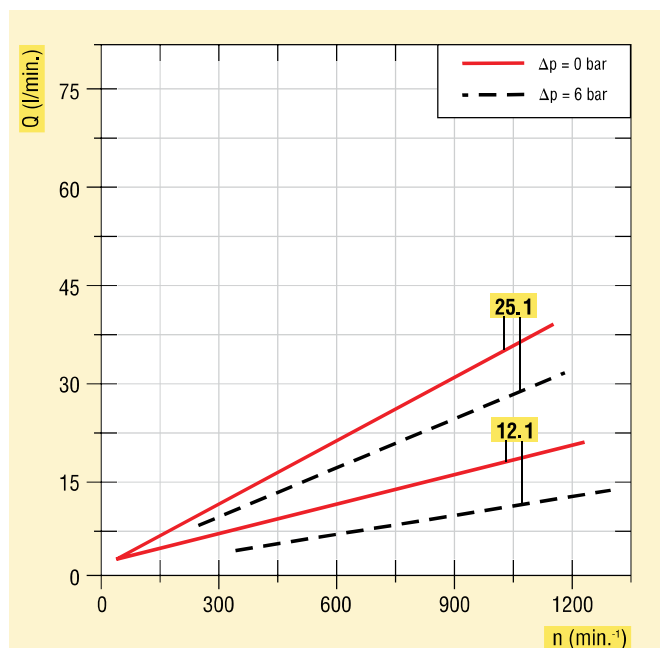
Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

## Important Information!

When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.


Viscosity range from aqueous to fluidity range.

Medium table with liquid examples see chemical resistance table.



# Lutz Eccentric Screw Pumps


## B70V 12.1 and 25.1

Productdetail		Pump tube		B70V					
	Size		<b>12.1</b>	<b>12.1</b>	<b>12.1</b>	<b>25.1</b>	<b>25.1</b>	<b>25.1</b>	<b>25.1 Steel</b>
	Seal	Packing gland (St) Mechanical seal (MS)	MS	MS	St	MS	MS	St	MS
	Drive shaft	Torsion shaft (TS) Universal joint shaft	TS (UJ)	UJ	UJ	TS	UJ	UJ	TS
	Delivery rate*	up to l/min.	12	12	12	25	25	25	25
	Delivery head*	up to bar	6	6	6	8	8	8	8
	Temp. of medium**	up to °C	140	140	140	140	140	140	80
	Material pump tube		1.4571	1.4571	1.4571	1.4571	1.4571	1.4571	Galv. Steel
	Immersion tube diameter	mm	54	54	54	54	54	54	54
	Pressure joint ▲	Outer thread	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2
	Weight	kg	7	7	7	7	7	7	7
	Length***	mm	1000	1000	1000	1000	1000	1000	1000
	Stator NBR light (T max. 80 °C)	Order-No.	–	–	–	<b>0172-121</b>	<b>0173-131</b>	<b>0173-121</b>	<b>0171-121</b>
	Stator Viton® (T max. 140 °C)	Order-No.	–	–	–	<b>0172-122</b>	<b>0173-132</b>	<b>0173-122</b>	<b>0171-122</b>
	Stator PTFE (T max. 140 °C)	Order-No.	<b>0172-004</b>	<b>0173-014</b>	<b>0173-004</b>	<b>0172-124</b>	<b>0173-134</b>	<b>0173-124</b>	<b>0171-124</b>
<b>B70V HD-D</b> Stator PTFE (T max. 140 °C)	Order-No.		<b>0173-016</b>			<b>0173-136</b>			



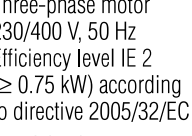
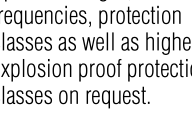

\* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator  
 \*\* with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)  
 \*\*\* Special length 500 - 2000 mm on request (version with joint shaft only)

Combination of packing gland and torsion shaft on request

● Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA (B70V) or IIB (B70V HD-D) and temperature class T4



Choice of motors				
	<b>Motors with cable terminal box</b>	<b>For B70V - 12.1</b>		<b>For B70V - 25.1</b>
	Type	0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min. 0.75 kW, 900 1/min.
	Protection class/Weight	IP 55 15.7 kg	IP 55 11.3 kg	IP 55 15.7 kg IP 55 17.3 kg
	Order-No.	<b>0172+803</b>	<b>0172+806</b>	<b>0172+809</b> <b>0172+812</b>
	<b>Motors with protection switch</b>	<b>For B70V - 12.1</b>		<b>For B70V - 25.1</b>
	Type	0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min. 0.75 kW, 900 1/min.
	Protection class/Weight	IP 54 15.7 kg	IP 54 11.3 kg	IP 54 15.7 kg IP 54 17.3 kg
	Order-No.	<b>0172+802</b>	<b>0172+805</b>	<b>0172+808</b> <b>0172+811</b>
	<b>Motors, explosion proof</b>	<b>For B70V - 12.1</b>		<b>For B70V - 25.1</b>
	Type	0.37 kW, 700 1/min.	0.55 kW, 900 1/min.	0.55 kW, 700 1/min. 0.65 kW, 900 1/min.
	Protection class	II 2 G Ex e II T3	II 2 G Ex e II T3	II 2 G Ex e II T3 II 2 G Ex e II T3
	Protection class/Weight	IP 54 16.4 kg	IP 54 17.2 kg	IP 54 18 kg IP 54 15.3 kg
Order-No.	<b>0172-801</b>	<b>0172-804</b>	<b>0172-807</b> <b>0172-810</b>	
	<b>Motors with frequency converter</b>	<b>For B70V - 12.1</b>		<b>For B70V - 25.1</b>
	Type	0.55 kW, 0-900 1/min.	0.55 kW, 0-900 1/min.	0.75 kW, 0-900 1/min.
	Protection class/Weight	IP 54 13.5 kg	IP 54 13.5 kg	IP 54 15 kg
	Order-No.	<b>0172-769</b>	<b>0172-769</b>	<b>0172-768</b>
	<b>Compressed air motors</b>	<b>For B70V - 12.1</b>		<b>For B70V - 25.1</b>
	Type	<b>4 DA</b> , 0.45 kW, 900 1/min., Weight 5 kg, Operating pressure at 6 bar, Air consumption 55 Nm³/h, 87 dB (A)		<b>6 DA</b> , 1.0 kW, 900 1/min., Weight 10 kg, Operating pressure at 6 bar, Air consumption 80 Nm³/h, 87 dB (A)
	Air supply thread	G 3/8		G 1/2
	Order-No.	<b>0172-821</b>		<b>0172-822</b>

Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

# B70V 25.2 and 50.1

for viscosities from 1 - 100,000 mPas

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

Version:	B70V 25.2/50.1	B70V HD-D 25.2/50.1	B70V PURE 25.2/50.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)	FPM (Viton®) or EPDM
Mechanical seal:	Carbon/CrMo-casting, Viton®	WC/WC/EPDM	WC/SiC/FKM-FDA or EPDM-FDA
Packing gland:	PTFE Soft packing safe for use with foodstuffs	–	–
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	PTFE	PTFE

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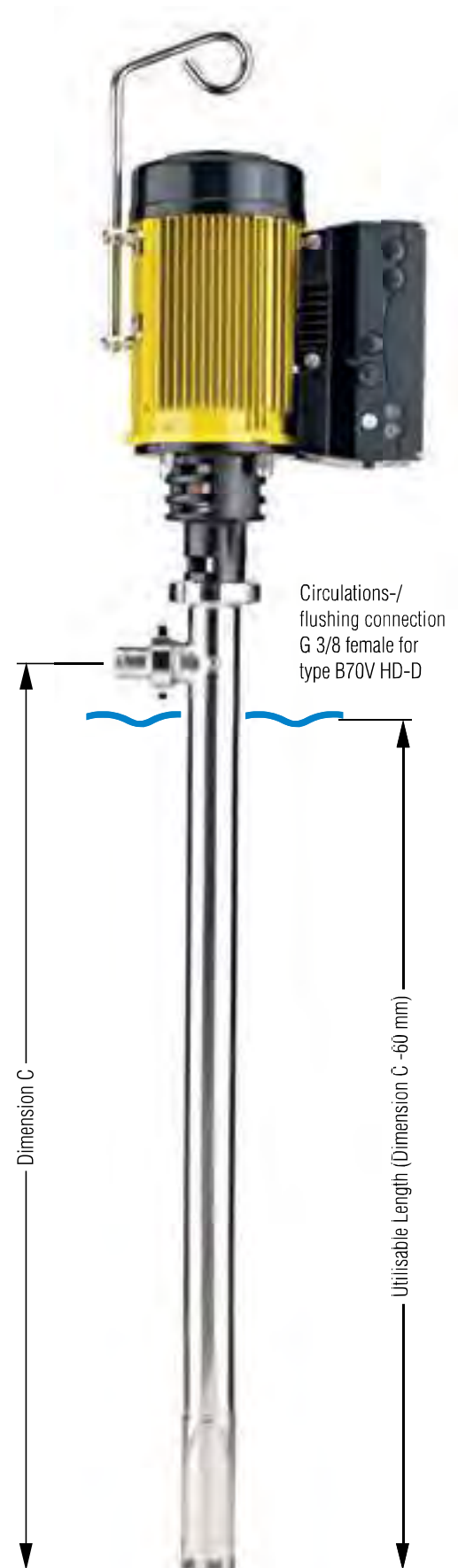
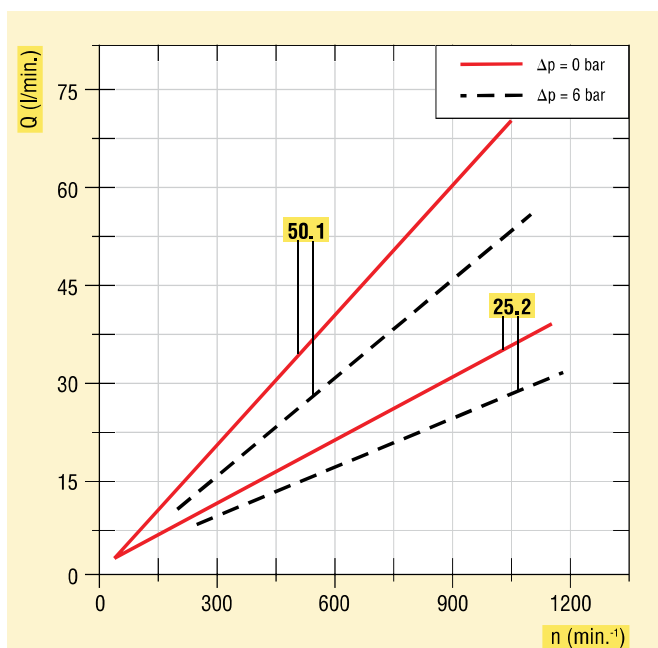


Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.

## Important Information!




When pumping in „Zone 0“ areas or pumping flammable liquids only pumps with mechanical seal, universal joint shaft and PTFE stator are approved.

Viscosity range from aqueous to fluidity range.  
Medium table with liquid examples see chemical resistance table.



# Lutz Eccentric Screw Pumps

## B70V 25.2 and 50.1

Productdetail		Pump tube						B70V	
	Size		25.2	25.2	25.2	50.1	50.1	50.1	
	Seal	Packing gland (St) Mechanical seal (MS)	MS	MS	St	MS	MS	St	
	Drive shaft	Torsion shaft (TS) Universal joint shaft (UJ)	TS	UJ	UJ	TS	UJ	UJ	
	Delivery rate*	up to l/min.	25	25	25	50	50	50	
	Delivery head*	up to bar	10	10	10	8	8	8	
	Temp. of medium**	up to °C	140	140	140	140	140	140	
	Material pump tube		1.4571	1.4571	1.4571	1.4571	1.4571	1.4571	
	Immersion tube diameter	mm	54	54	54	54	54	54	
	Pressure joint ▲	Outer thread	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	G 1 1/2	
	Weight	kg	7	7	7	7	7	7	
	Length***	mm	1100	1100	1100	1100	1100	1100	
	Stator NBR light (T max. 80 °C)	Order-No.	–	–	–	0172-501	0173-511	0173-501	
	Stator Viton® (T max. 140 °C)	Order-No.	–	–	–	0172-502	0173-512	0173-502	
	Stator PTFE (T max. 140 °C)	Order-No.	0172-254	0173-264	0173-254	0172-504	0173-514	0173-504	
<b>B70V HD-D</b> Stator PTFE (T max. 140 °C)	Order-No.		0173-266			0173-516			
<p>* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator            ** with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)            *** Special length 500 - 2000 mm on request (version with joint shaft only)</p> <p>Combination of packing gland and torsion shaft on request</p> <p>● Explosion proof eccentric screw pump approved category 1 / 2 (acc. to ATEX) for pumping inflammable liquids of the explosion group IIA (B70V) or IIB (B70V HD-D) and temperature class T4</p>									
<b>Choice of motors</b>									
	<b>Motors with cable terminal box</b>		<b>For B70V - 25.2 and B70V - 50.1</b>						
	Type		0.75 kW, 700 1/min.		1.1 kW, 700 1/min.		1.1 kW, 900 1/min.		
	Protection class/Weight		IP 55 17.3 kg		IP 55 21 kg		IP 55 21.1 kg		
	Order-No.		0172+815		0172+826		0172+818		
	<b>Motors with protection switch</b>		<b>For B70V - 25.2 und B70V - 50.1</b>						
	Type		0.75 kW, 700 1/min.		1.1 kW, 700 1/min.		1.1 kW, 900 1/min.		
	Protection class/Weight		IP 54 17.3 kg		IP 54 21 kg		IP 54 21.1 kg		
	Order-No.		0172+814		0172+825		0172+817		
	<b>Motors, explosion proof</b>		<b>For B70V - 25.2 und B70V - 50.1</b>						
	Type		0.65 kW, 700 1/min.		1.0 kW, 900 1/min.				
Protection class		II 2 G Ex e II T3		II 2 G Ex e II T3					
Protection class/Weight		IP 54 20 kg		IP 54 20 kg					
Order-No.		0172-813		0172-816					
<b>Motors with frequency converter</b>		<b>For B70V - 25.2 and B70V - 50.1</b>							
Type		0,75 kW, 0-900 1/min.		1,1 kW, 0-900 1/min.					
Protection class/Weight		IP 54 15 kg		IP 54 20 kg					
Order-No.		0172-768		0172-767					
	<b>Compressed air motors</b>		<b>For B70V - 25.2 / 50.1</b>						
	Type		<b>8 DA</b> , 1.7 kW, 900 1/min., Weight 14 kg						
	Air supply thread		Operating pressure at 6 bar, Air consumption 130 Nm³/h, 102 db (A)						
	Order-No.		G 1/2						
Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).									

▲ PURE version Tri-Clamp DN 50

# B70V 75.1

for viscosities from 1 - 100,000 mPas

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

Version:	B70V 75.1	B70V PURE 75.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®) or EPDM
Mechanical seal:	Carbon/CrMo-casting, Viton®	WC/SiC/FKM-FDA or EPDM-FDA
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, Viton®, PTFE	PTFE

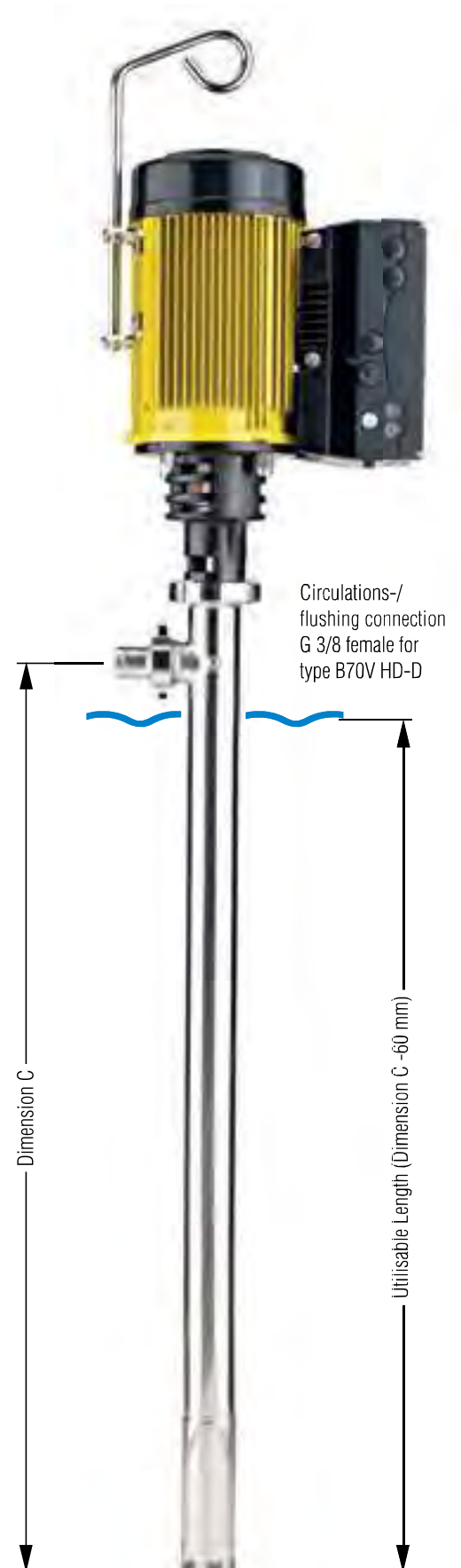
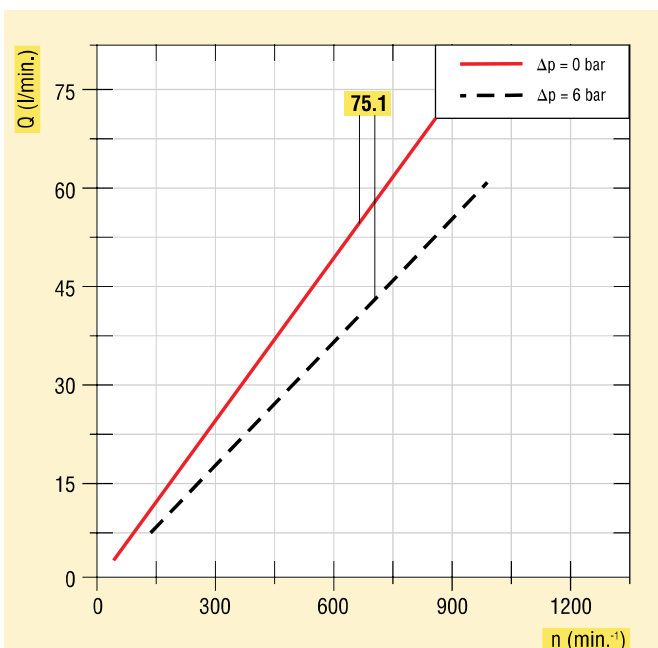
Viton® is a registered trademark of DuPont Performance Elastomers.



Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.


## Important Information!

Viscosity range from aqueous to fluidity range.  
Medium table with liquid examples see chemical resistance table.



# Lutz Eccentric Screw Pumps

## B70V 75.1

Productdetail	Pump tube	B70V	
	Size	<b>75.1</b>	
	Seal Mechanical seal (MS)	MS	
	Drive shaft Universal joint shaft (UJ)	UJ	
	Delivery rate*	up to l/min. 75	
	Delivery head*	up to bar 8	
	Temp. of medium**	up to °C 140	
	Material pump tube	1.4571	
	Immersion tube diameter mm	54	
	Pressure joint ▲	Outer thread G 1 1/2	
	Weight kg	7	
	Length*** mm	1100	
	Stator NBR light (T max. 80 °C)	Order-No.	<b>0173-561</b>
	Stator Viton (T max. 140 °C)	Order-No.	<b>0173-562</b>
	Stator PTFE (T max. 140 °C)	Order-No.	<b>0173-564</b>

\* Determined with water at 20 °C, three-phase motor (900 rpm) and elastomer stator  
 \*\* with PTFE Stator (the medium temperature of explosion proof eccentric screw pumps B70 may not exceed 100°C)  
 \*\*\* Special length 500 - 2000 mm on request (version with joint shaft only)

### Choice of motors

Motors with cable terminal box	For B70V - 75.1		
Type	1.1 kW, 700 1/min.	1.5 kW, 700 1/min.	1.5 kW, 900 1/min.
Protection class/Weight	IP 55 21 kg	IP 55 33 kg	IP 55 30 kg
Order-No.	<b>0172+826</b>	<b>0172-761</b>	<b>0172+829</b>

Motors with protection switch	For B70V - 75.1		
Type	1.1 kW, 700 1/min.	1.5 kW, 700 1/min.	1.5 kW, 900 1/min.
Protection class/Weight	IP 54 21 kg	IP 54 33 kg	IP 54 30 kg
Order-No.	<b>0172+825</b>	<b>0172-760</b>	<b>0172+828</b>

Motors with frequency converter	For B70V - 75.1
Type	1.5 kW, 0-900 1/min.
Protection class/Weight	IP 54 34 kg
Order-No.	<b>0172-766</b>

Three-phase motor 230/400 V, 50 Hz, efficiency level IE 2 (≥ 0.75 kW) according to directive 2005/32/EC.  
 Special voltages, frequencies, protection classes as well as higher explosion proof protection classes on request.

Compressed air motors	For B70V - 75.1
Type	<b>8 DA</b> , 1.7 kW, 900 1/min., Weight 14 kg Operating pressure at 6 bar, Air consumption 130 Nm <sup>3</sup> /h, 102 db (A)
Air supply thread	G 1/2
Order-No.	<b>0172-823</b>

Compressed air motors with muffler up to an operation pressure at 7 bar, recommended speed (200 - 900 1/min).

# B70V 120.1

for viscosities from 1 - 120,000 mPas

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

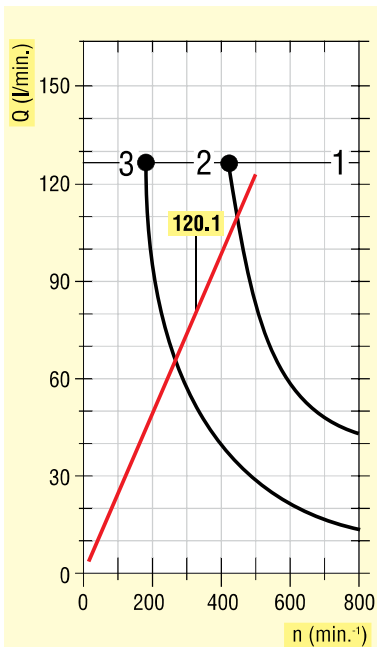
Version:	B70V 120.1	B70V PURE 120.1
Housing:	Stainless steel (1.4571)	Stainless steel (1.4571)
Rotor:	Stainless steel (1.4571)	Stainless steel (1.4571)
Seals:	FPM (Viton®)	FPM (Viton®)
Mechanical seal:*	WC/WC, Viton®	WC/WC, Viton®
Drive shaft:	Stainless steel (1.4571)	Stainless steel (1.4571)
Stator material:	NBR light, PTFE	PTFE

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\* Mechanical seal pairing on request.



Pump tube with PTFE stator, also available in PURE version with Tri-Clamp-connection. The pump tubes are mainly used in the food-, cosmetics- and pharmaceutical industry.



### Range 1:

Thin-bodied and lubricating fluids such as wine, milk, oils etc.  
 $\eta < 7000$  mPas

### Range 2:

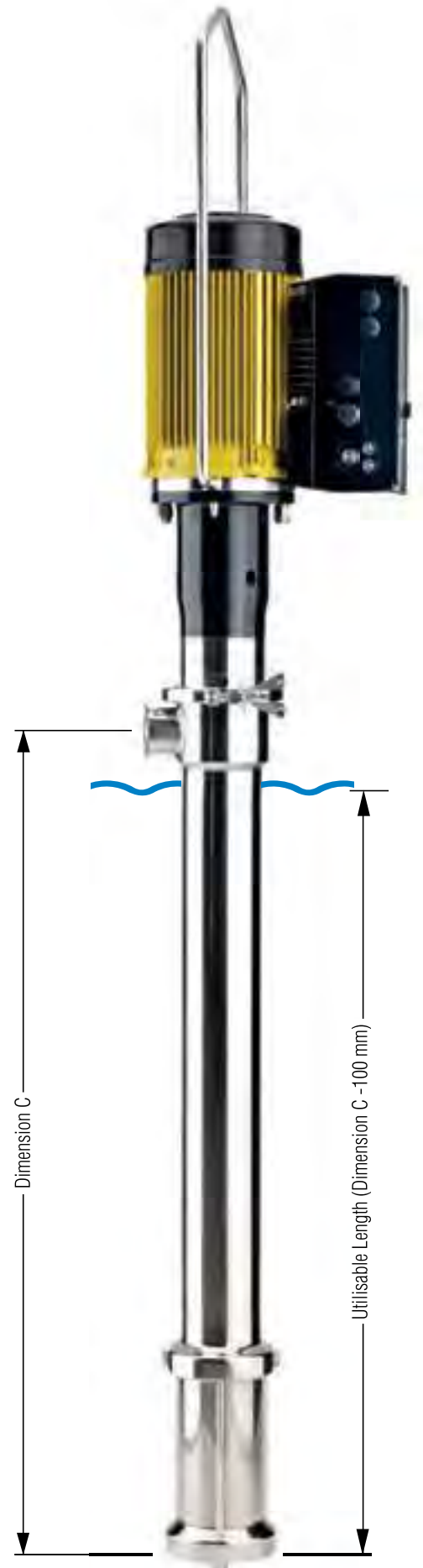
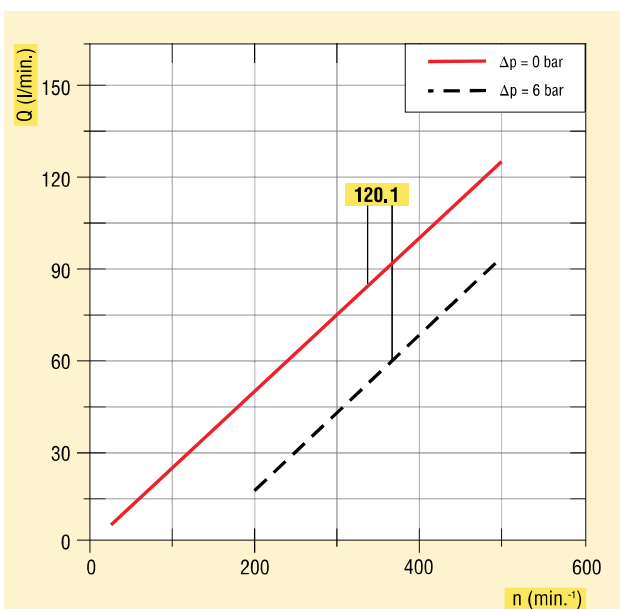
Abrasive and viscous fluids such as pulps, adhesives, paints, inks, etc.  
 $\eta < 20,000$  mPas

### Range 3:

Very abrasive and highly viscous fluids such as honey, greases, syrups, etc.  
 $\eta > 20,000$  mPas

### Viscosity range:

Up to limit of flowability





# Lutz Eccentric Screw Pumps

## B70V 120.1

Productdetail

**Pump tube**

**B70V**



Size		<b>120.1</b>
Category 1 / 2 (acc. to ATEX)	no	
Seal	Mechanical seal (MS)	MS
Drive shaft	Universal joint shaft (UJ)	UJ
Delivery rate*	up to l/min.	120
Delivery head*	up to bar	6
Temp. of medium**	up to °C	140
Material pump tube		1.4571
Immersion tube diameter***	up to mm	131
Pressure joint		Tri Clamp DN 50 (DIN 32676)
Weight	kg	15
Length****	mm	1100
Stator NBR light (T max. 80 °C)	Order-No.	<b>0175-201</b>
Stator PTFE (T max. 140 °C)	Order-No.	<b>0175-204</b>

\* Determined with water at 20 °C, three-phase motor (600 rpm and 700 rpm) and elastomer stator

\*\* with PTFE Stator

\*\*\* required bung hole  $\varnothing$  133 mm

\*\*\*\* Special length 500 - 2500 mm on request

### Choice of motors

#### Drive motors

Three-phase motors 230/400 V, 50 Hz, efficiency level IE 2, protection class IP 55 with cable terminal box, protection switch or frequency converter.

Special voltages, frequencies, protection class on request.

#### Connection dimensions

according to IEC 34 part 7 form B14 type M100

