

ULTILOBE

Lobe pump



APPLICATION

The ULTILOBE pump is a positive displacement rotary lobe pump with a hygienic design for installations in the dairy, food, beverage, cosmetics, pharmaceutical and fine chemical industries.

The pump is ideal for handling all kinds of fluids and for meeting filtering and bottling needs. The specially designed lobes mean products containing delicate solids can be pumped without being damaged.

DESIGN AND FEATURES

The ULTILOBE rotary lobe pump is a bare shaft pump. It consists mainly of a pump casing and cover made from investment casting stainless steel and tri-lobe rotors. The single mechanical seal is internal type, balanced, with hygienic design and can be fully disassembled from the front.

TECHNICAL SPECIFICATIONS

Materials

Parts in contact with the product	1.4404 (AISI 316L)
Bearing bracket	1.4307 (AISI 304L)
Gaskets in contact with the product	EPDM

Mechanical seal

Type	Internal, front disassembly
Rotating part	Carbon (C) or Silicon carbide (SiC)
Stationary part	Silicon carbide (SiC)
Gaskets	EPDM

Surface finish

Internal	$Ra \leq 0.8 \mu m$
External	Matte

Connections

DIN 11851

Operating thresholds

Maximum operating pressure	1600 kPa (16 bar)	232 PSI
Maximum operating temperature (EPDM)	-10°C to 120°C	14°F to 248°F
Temperature, maximum SIP cleaning time	140°C for 30 min	284°F

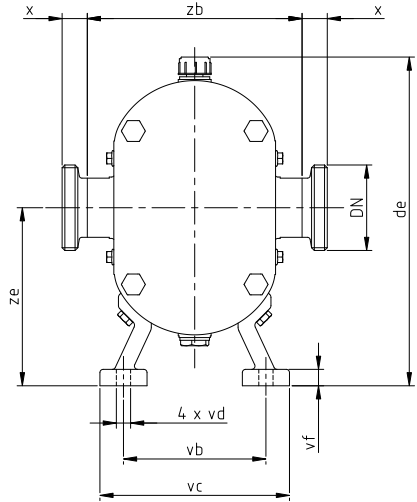
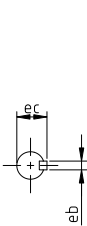
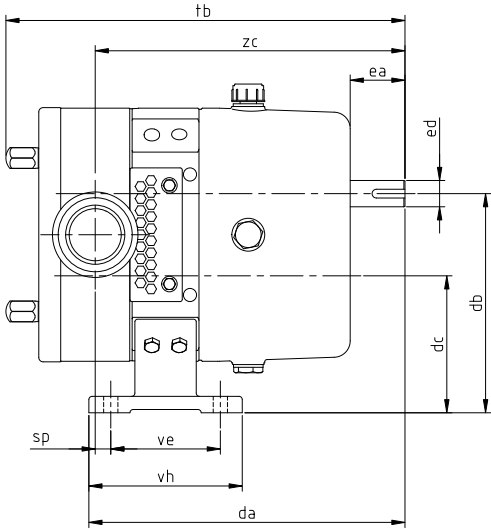
Pump	Connections size		Displacement [litres/rev]	Maximum differential pressure [kPa]	Maximum speed [rpm]	Maximum flow rate ¹ [m³/hour]
	DN	OD				
UL-12	25	1"	0.069	1200	1400	5.70
UL-13	40	1½"	0.103	700		8.70
UL-22	40	1½"	0.178	1200	1200	12.8
UL-23	50	2"	0.268	700		19.3
UL-32	50	2"	0.252	1200	1000	15.1
UL-33	65	2½"	0.390	700		23.4
UL-42	65	2½"	0.572	1200	1000	34.3
UL-43	80	3"	0.859	700		51.5

1) theoretical maximum flow rate at maximum speed

OPTIONS

- SiC/SiC mechanical seal.
- Other types of seals are available in addition to the single mechanical seal: cooled mechanical seal (quench) and double mechanical seal.
- FPM gaskets.
- Front or external pressure bypass.
- Front heating chamber.
- Bi-wing rotors.
- Vertical ported option.
- Clamp and SMS connections.

HORIZONTAL NOZZLE DIMENSIONS

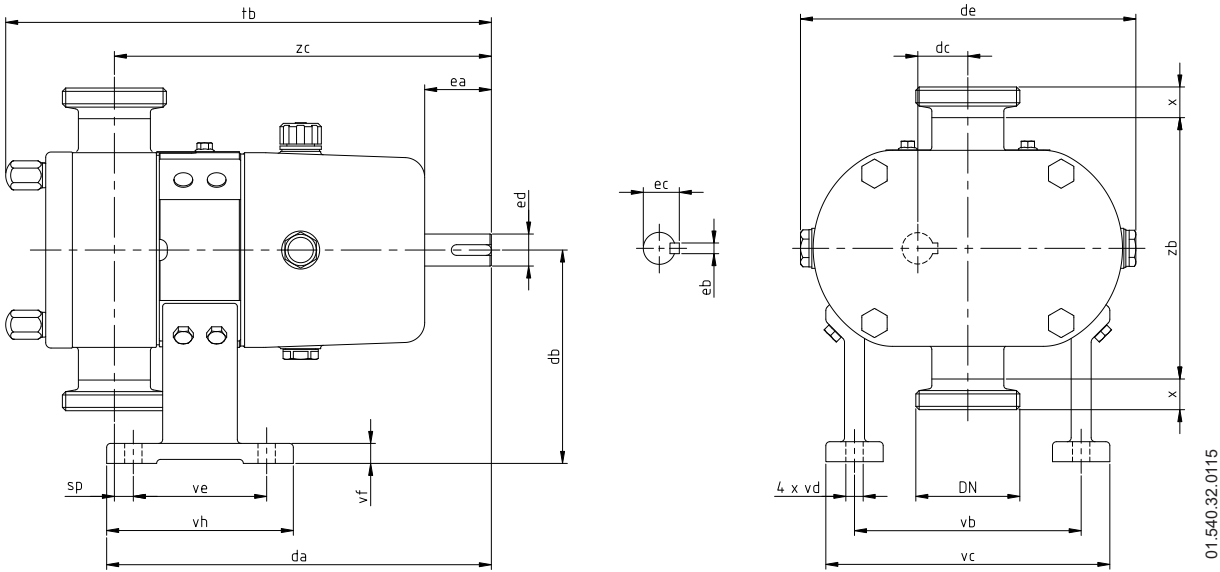


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Pump	zb	DIN 11851		SMS		CLAMP OD	
		DN	x	DN	x	DN	x
UL-12	126	25	22	25	19	1"	21.5
UL-13		40	22	38	23	1½"	21.5
UL-22	166	40	22	38	23	1½"	21.5
UL-23		50	23	51	23	2"	21
UL-32	196	50	23	51	23	2"	21
UL-33		65	25	63.5	27	2½"	21
UL-42	230	65	25	63.5	27	2½"	21
UL-43		80	25	76	27	3"	21

Pump	da	db	dc	de	ea	eb	ec	ed	sp	tb	vb	vc	vd	ve	vf	vh	zc	ze	Kg
UL-12	222	160	110	235	40	5	18	16	10	278	100	136	9	75	12	100	219	135	15
UL-13									18	295							227		16
UL-22	253	180	115	270	45	6	24.5	22	15	325	120	160	11	80	15	115	251	147.5	26
UL-23									24	340							260		28
UL-32	288	200	125	300	50	8	27	24	14	365	130	173	13	100	15	140	283	162.5	41
UL-33									25	390							294		46
UL-42	360	250	155	375	80	10	41	38	14	450	160	215	17.5	120	18	165	253	202.5	73
UL-43									27	475							365		80

VERTICAL NOZZLE DIMENSIONS



Pump	zb	DIN 11851		SMS		CLAMP OD	
		DN	x	DN	x	DN	x
UL-12	126	25	22	25	19	1"	21.5
UL-13		40	22	38	23	1½"	21.5
UL-22	166	40	22	38	23	1½"	21.5
UL-23		50	23	51	23	2"	21
UL-32	196	50	23	51	23	2"	21
UL-33		65	25	63.5	27	2½"	21
UL-42	230	65	25	63.5	27	2½"	21
UL-43		80	25	76	27	3"	21

Pump	da	db	dc	de	ea	eb	ec	ed	sp	tb	vb	vc	vd	ve	vf	vh	zc	Kg
UL-12	222	112	25	180	40	5	18	16	10	278	115	151	9	75	12	100	219	17
UL-13									18	295							227	18
UL-22	253	140	32.5	225	45	6	24.5	22	15	325	145	185	11	80	15	115	251	28
UL-23									24	340							260	31
UL-32	288	160	37.5	255	50	8	27	24	14	365	170	213	13	100	15	140	283	43
UL-33									25	390							294	47
UL-42	360	200	47.5	315	80	10	41	38	14	450	210	265	17.5	120	18	165	253	77
UL-43									27	475							365	84