

## I Application

The bottom side entry agitators are used in process and storage tanks in the applications of the food-processing industry.

The main application is agitation of low viscosity products like wine, oil, milk, beer, alcohol, etc. in large volume tanks.

## I Operating principle

The LR agitators are driven by geared motors and the LM agitators are provided with direct motors.

These agitators are installed in a slanted position.

The rotation of the propeller creates a flow that impells the product to the bottom of the tank and then raises up to the surface along the wall opposite to the agitator. The effect is promoted if the bottom is curved.

The agitator is installed decentralized to enhance the circular flow. Thus a complete homogenization of the product is achieved.

## I Design and features

Side-entry agitator.

Internal mechanical seal: EN12756 (DIN 24960 L1K).

Economical for use in large volume tanks.

Robust and sanitary design.

Easy maintenance.

The propeller fixed to the shaft by means of a threaded connection and a gasket.

Helical geared motors.

Motor: 3 ph, 230/400 V, 50 Hz, IP55, 1500 rpm.

Marine propeller (Type10).

## I Materials

Parts in contact with the product

AISI 316L

Lantern and bearing support

GG 15

Mechanical seal

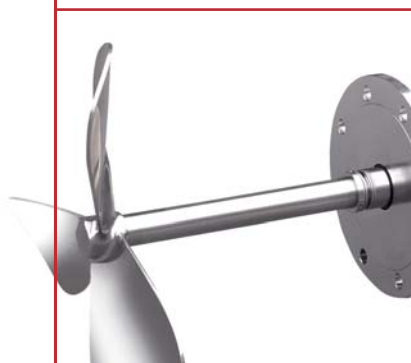
C/SiC/EPDM

Gaskets

EPDM

Surface finish

electropolished

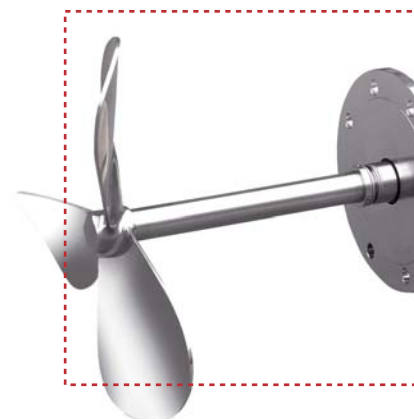


Propeller Type 19



**I Options**

- SiC/SiC mechanical seal.
- Double mechanical seal.
- Gaskets: FPM.
- Safety packing.
- Other propeller types: sanitary (Type 2), high flow (Type 19), etc.
- ¼" BSP ball valve for venting or dosing.
- St.St. motor shroud.
- Motors with other protections.
- ATEX (LR) model available.



**I Technical specifications**

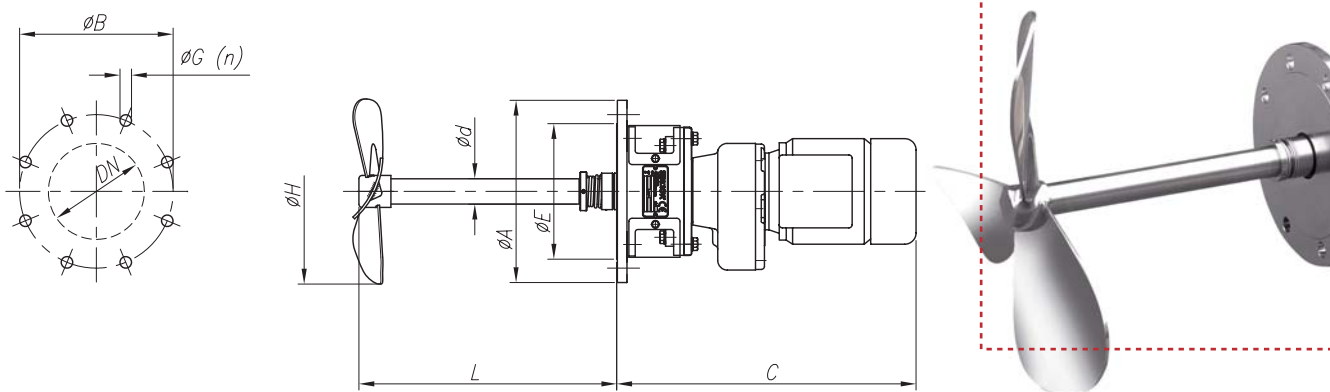
Type	Flow <sup>(1)</sup> [m³/h]	Tank <sup>(2)</sup> [m³]	Speed [rpm]	Power [kW]	Weight [kg]
LR 1.10 - 20005 - 1 - 325	248	5-20	200	0,55	54
LR 1.10 - 20007 - 1 - 400	460	20-50		0,75	57
LR 1.10 - 20015 - 1 - 500	920	50-100		1,5	64
LR 1.10 - 20030 - 1 - 600	1555	100-150		3	77
LR 1.10 - 20040 - 1 - 650	1978	150-200		4	135

Type	Flow <sup>(1)</sup> [m³/h]	Tank <sup>(2)</sup> [m³]	Speed [rpm]	Motor power [kW]	Weight [kg]
LM 1.10-4015-1-175	280	5-20	1500	1,5	46
LM 1.10-4030-1-200	420	20-50		3	56
LM 1.10-4055-1-225	594	50-80		5,5	66
LM 1.10-4075-1-250	820	80-140		7,5	75
LM 1.10-4092-1-250				9,2	86
LM 1.10-4110-1-275	1086	140-200	11	145	
LM 1.10-6011-1-200	275	5-20	1000	1,1	48
LM 1.10-6022-1-225	390	20-60		2,2	62
LM 1.10-6030-1-250	560			3	66
LM 1.10-6055-1-275	720	60-90		5,5	75
LM 1.10-6075-1-300	940	90-150		7,5	150
LM 1.10-6110-1-350	1460	150-200		11	182

(1) Theoretical flow.  
 (2) Tank volume recommended to keep the homogeneity of the product.

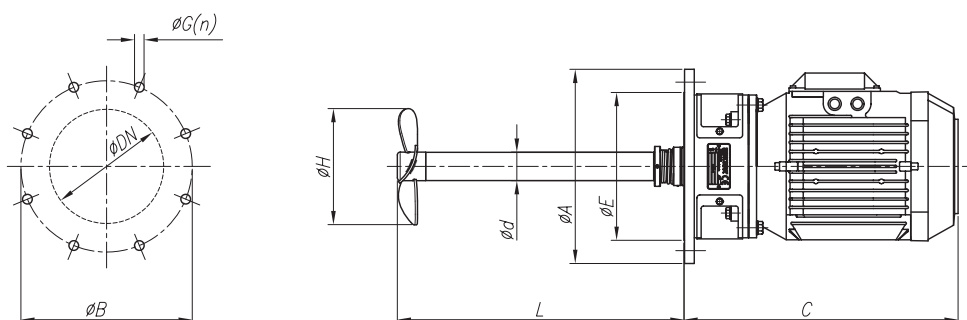


LR dimensions



Type	Flange					Agitator shaft		$\varnothing H$	$C_{max}$
	$\varnothing DN$	$\varnothing A$	$\varnothing B$	$\varnothing E$	$\varnothing G (n)$	$\varnothing d$	L		
LR 1.10 - 20005 - 1 - 325	150	285	240	212	18 (8)	40	400	325	468
LR 1.10 - 20007 - 1 - 400								400	468
LR 1.10 - 20015 - 1 - 500								500	510
LR 1.10 - 20030 - 1 - 600	200	340	295	259	23 (8)	50	500	600	570
LR 1.10 - 20040 - 1 - 650	250	395	350	312	23 (12)	60		650	710

LM dimensions



Type	Flange					Agitator shaft		$\varnothing H$	$C_{max}$
	$\varnothing DN$	$\varnothing A$	$\varnothing B$	$\varnothing E$	$\varnothing G (n)$	$\varnothing d$	L		
LM 1.10-4015-1-175	150	285	240	212	18 (8)	40	400	175	375
LM 1.10-4030-1-200								200	405
LM 1.10-4055-1-225								225	500
LM 1.10-4075-1-250	250	500							
LM 1.10-4092-1-250	200	340	295	259	23 (8)	50	600	275	695
LM 1.10-4110-1-275	250	395	350	312	23 (12)	60		600	275
LM 1.10-6011-1-200	150	285	240	212	18 (8)	40	400	200	375
LM 1.10-6022-1-225								225	425
LM 1.10-6030-1-250	200	340	295	259	23 (8)	50	500	250	500
LM 1.10-6055-1-275								275	
LM 1.10-6075-1-300								300	695
LM 1.10-6110-1-350	350								

