

PODB-I

The Landia PODB-I is a self-priming propeller aerator. Air, and thus oxygen, is automatically sucked down through a tube and dissolved in the waste water with the help of a rapidly rotating propeller.

APPLICATION EXAMPLES

- Aeration of waste water or sludge
- Combined mixing and aeration
- Eliminates odours from the waste water
 - the waste water remains fresh
- Supplementary aeration at peak load
- Cleaning/washing of equalisation tanks



PROPELLER RPM

1,800 rpm

MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron AISI A48-40B
Propeller	Stainless steel AISI 304
Ejector nozzle	Stainless steel AISI 304
Shaft	AISI 4340
Bolts	Steel AISI 316
Sealing set	Mechanical shaft seals: silicon carbide/silicon carbide
Oil type	15W-40 Vario HDX (with moisture detection)

SERVICE AND MAINTENANCE

Recommended service interval/oil change	Maximum 2,500 operating hours/minimum once a year
Motor	Lifetime lubricated bearings
Oil chamber	Periodic oil change

SURFACE TREATMENT

2-component coating: RAL 7005 (Mouse Grey)

Mouse Grey

ELECTRICAL CABLE

Resistant to abrasion, oil and UV radiation.



Number of conductors:

SOOW 7AWG14

SOOW 10AWG10

23' (other lengths available upon request)

MONITORING FUNCTIONS

Bimetal thermal sensors 248 °F

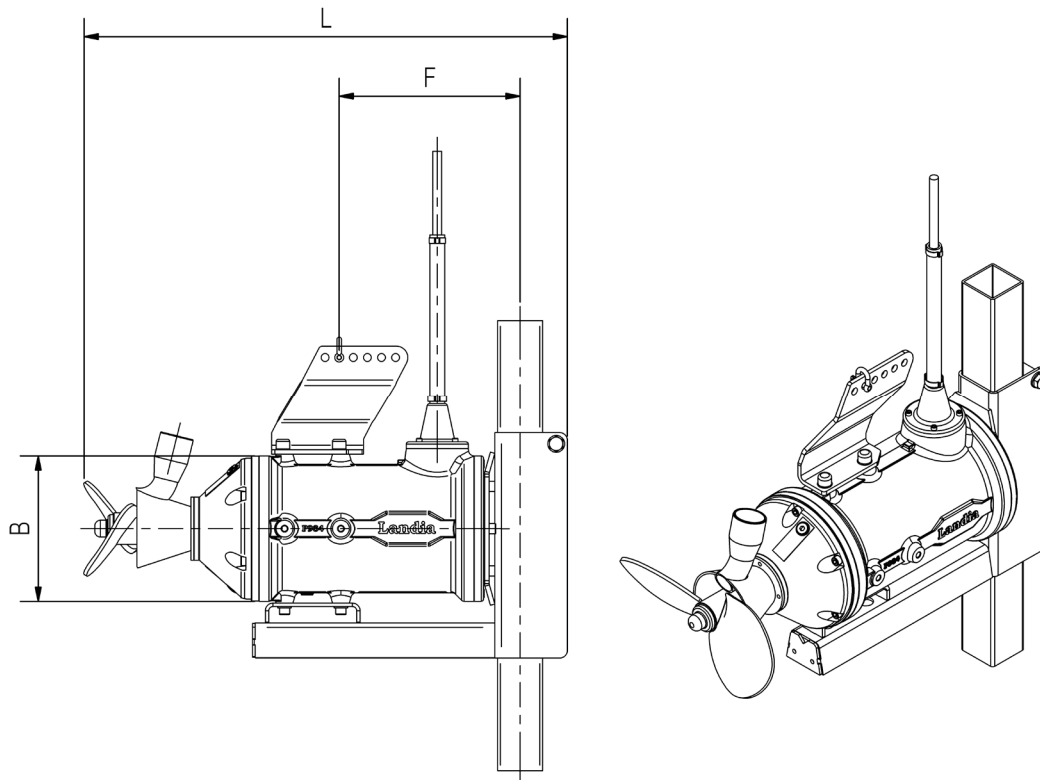
Moisture detection system (optional)

ELECTRICAL DATA

Motor type	3-phase AC motor
Nominal voltage	460 V
Minimum voltage allowed	415 V
Nominal frequency	60 Hz
Suitable for VFD-operation	Yes
Cage class	IP 68
Insulation class	F
ATEX classification	Class I, Groups C & D (option for selected models)
Variable-speed drives	Inverter Duty Rated

Model	Nominal power	Motor	Full load current (460 V)	Connection method		Start current (DOL)	cos phi	Efficiency (100%)
	[HP]	[rpm]	[A]	[V]	Y/Δ	[A]		[%]
PODB-I 3.6 HP-1800 rpm	3.6	1720	5.3	460	Y	34	0.75	81.0
PODB-I 6.5 HP-1800 rpm	6.5	1735	9.0	460	Δ	66	0.78	85.0
PODB-I 9.0 HP-1800 rpm	9.0	1745	11.0	460	Δ	72	0.88	86.0
PODB-I 17.9 HP-1800 rpm	17.9	1755	22.0	460	Δ	152	0.84	88.4
PODB-I 30.2 HP-1800 rpm	30.2	1760	36.0	460	Δ	241	0.85	90.0

OVERALL DIMENSIONS



Model	Standard propeller diameter [inch]	B [inch]	F [inch]	L [inch]	Guide pipe [inch]	Weight [lb]
PODB-I 3.6 HP-1800 rpm	7.5	7	7.5	21.6	3.1x3.1	86
PODB-I 6.5 HP-1800 rpm	9.1	8	9.5	27.2	3.1x3.1	137
PODB-I 9.0 HP-1800 rpm	10.2	9	-	28.5	3.1x3.1	154
PODB-I 17.9 HP-1800 rpm	12.2	10	11.2	32.7	3.1x3.1	267
PODB-I 30.2 HP-1800 rpm	13.2	12	11.0	35.8	3.9x3.9	395

We reserve the right to make technical alterations.