

# PODB-I

The Landia PODB-I is a self-priming propeller aereeto 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

1,500 rpm

## MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron EN-GJL-250
Propeller	Stainless steel W1.4301/AISI304
Ejector nozzle	Stainless steel W1.4301/AISI304
Shaft	W1.6582/AISI4340
Bolts	A4
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

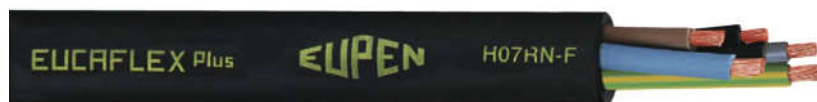
2-component coating: RAL 7005 (Mouse Grey)

Mouse Grey

## ELECTRICAL CABLE

H07RN-F/S07RN-F EUCAFLEX<sup>Plus</sup> Cable.

Resistant to oil and UV radiation.



Number of conductors:

H07RN-F 7G1.5 mm<sup>2</sup> (Not used in United Kingdom)

H07RN-F 7G2.5 mm<sup>2</sup> (Only United Kingdom. Motor ≤ 5,5 kW)

S07RN-F 7G4+3x1.5 mm<sup>2</sup>

As standard supplied with 7 m of cable (extra length available upon request).

## MONITORING FUNCTIONS

Bimetal thermal sensors 120 °C

Moisture detection system (optional)

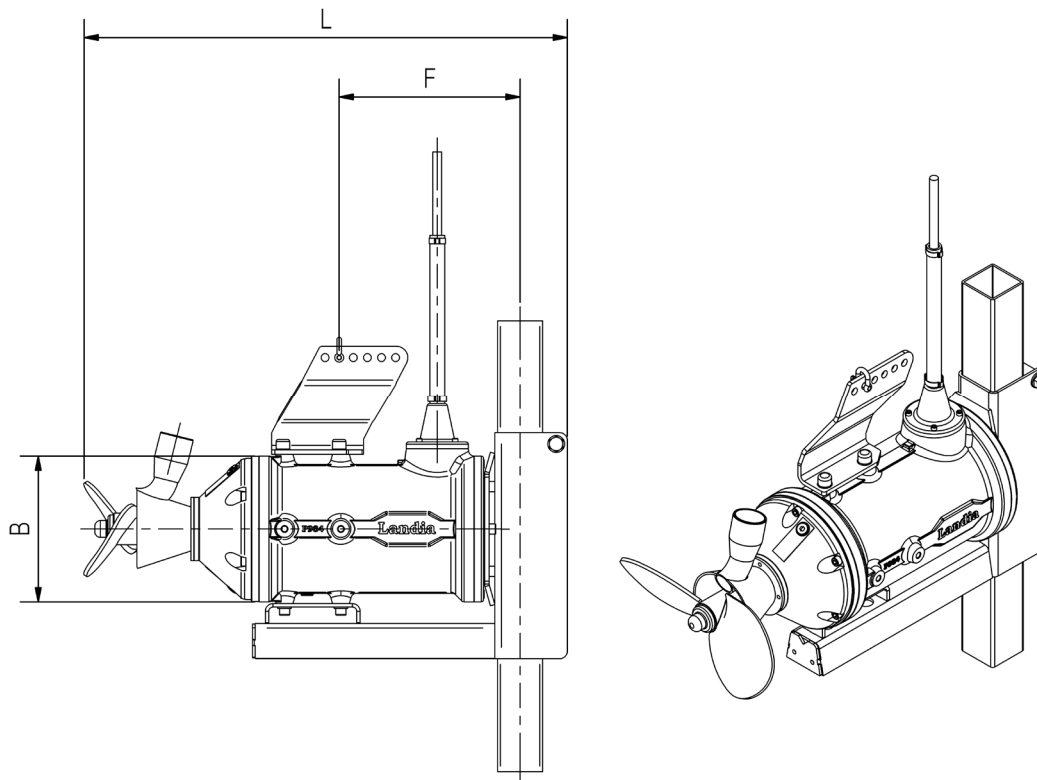
**ELECTRICAL DATA**

Motor type	3-phase AC motor
Nominal voltage	400 V
Minimum voltage allowed	360 V
Nominal frequency	50 Hz
Applicable for VFD operation	Yes
Ingress protection rating	IP 68
Insulation class	F
ATEX classification	II 2 G Ex db h IIB T4 Gb (Option, only available for specific models)

Model	Nominal power	Motor	Full load current (400 V)	Connection method	Start current (DOL)	cos phi	Efficiency
	[kW]	[rpm]	[A]	Y/Δ	[A]		[%]
PODB-I 2.2 kW-1,500 rpm	2.2	1,410	5.0	Y	30	0.80	80.2
PODB-I 4.0 kW-1,500 rpm	4.0	1,435	8.8	Δ	61	0.78	84.1
PODB-I 5.5 kW-1,500 rpm	5.5	1,440	11.0	Δ	68	0.87	84.6
PODB-I 11.0 kW-1,500 rpm	11.0	1,455	21.5	Δ	146	0.84	87.9
PODB-I 18.5 kW-1,500 rpm	18.5	1,460	35.0	Δ	238	0.85	89.3

For voltages others than 400 V/50 Hz please refer to the attached Appendix.

**OVERALL DIMENSIONS**



Model	Propeller diameter [mm]	B [mm]	F [mm]	L [mm]	Guide pipe [mm]	Weight [kg]
PODB-I 2.2 kW-1,500 rpm	ø190	190	190	555	80x80	39
PODB-I 4.0 kW-1,500 rpm	ø245	215	240	690	80x80	62
PODB-I 5.5 kW-1,500 rpm	ø260	230	-	725	80x80	70
PODB-I 11.0 kW-1,500 rpm	ø310	265	295	830	80x80	121
PODB-I 18.5 kW-1,500 rpm	ø335	320	280	910	100x100	179

We reserve the right to make technical changes.