# **MPTKR-GI**

The MPTKR-GI chopper pump is an integrated part of the Landia GasMix System. The pump is ideal for pumping sludge with a high dry matter content. The pump's knife system prevents clogging and ensures a steady chopping of organic material, leading to increased biogas production.

#### **APPLICATION EXAMPLES**

Landia GasMix mixing system

#### **PUMP RPM**

1,500 rpm



## MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron EN-GJL-250
Pump housing	W1.4408/AISI316
Pump impeller	W1.4408/AISI316
Pump Shaft	W1.4404/AISI316
Bolts	A4
Sealing system	Mechanical shaft seals: silicon carbide/silicon carbide
Knife system	W1.4404/AISI316
Extended knife system	W1.4404/AISI316 (optional)
Oil type	15W-40 Vario HDX (with moisture detection)



#### SERVICE AND MAINTENANCE

Recommended service interval/oil change	Maximum 2,000 operating hours/minimum once a year			
Motor	Lifetime lubricated bearings			
Oil chamber	Periodic oil change			

#### SURFACE TREATMENT

Machinery enamel: RAL 9005 (Jet Black)	Jet Black			
2-component coating: RAL 7005 (Mouse Grey) (optional)	Mouse Grey			

#### **MONITORING FUNCTIONS**

Thermistor Moisture detection system (optional)



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## **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 55
Insulation class	F

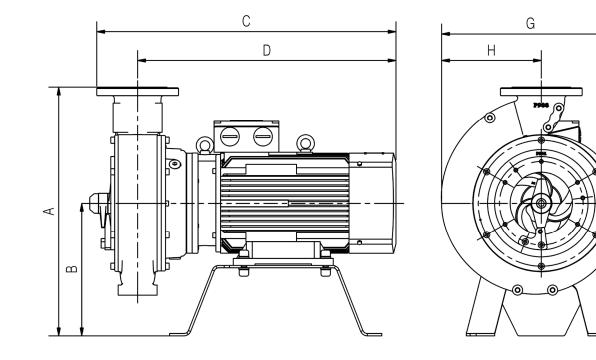
Model	Nominal power	Motor	Full load current (400 V)	Connection method	Start current (DOL)	cos phi	Efficiency
	[kW]	[rpm]	[A]	Υ/Δ	[A]		[%]
MPTKR-GI 105 18.5 kW-1,500 rpm	18.5	1,460	35.0	Δ	238	0.85	89.3
MPTKR-GI 105 18.5/15.0 kW-1,500 rpm	18.5	1,470	37.5	Δ	240	0.78	91.2

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



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## **OVERALL DIMENSIONS**

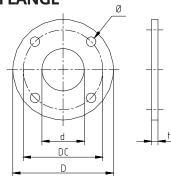


Model	ltem number	A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	H [mm]	Weight [kg]
MPTKR-GI 105 18.5 kW-1,500 rpm	2514281	640	340	730	625	460	250	228
MPTKR-GI 105 18.5/15.0 kW-1,500 rpm	2534281	640	340	752	647	460	250	270



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### **OVERALL DIMENSIONS WELDING FLANGE**



Model/ Pump series	Material	MPTK 50 - 65 – 80 - 105 DIN 2573 PN 6 Dim. [mm] MPTK 150 2576 PN 10 Dim. [mm]							
		D	DC	d	Ø	t			
MPTK-I 50	W1.4404/AISI316	ø110	90	ø52	4 x ø10	8			
MPTK-I 65	W1.4404/AISI316	ø160	130	ø69	4 x ø14	8			
MPTK-I 80	W1.4404/AISI316	ø192	150/160	ø82	4 x ø18	10			
MPTK-I 105	W1.4404/AISI316	ø212	170/180	ø107	4 x ø18	10			
MPTK-I 150	W1.4404/AISI316	ø285	240	ø152	8 x ø22	12			

We reserve the right to make technical changes.



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Prepared by: BNV/GB Approved by: KSK/TM