

DG-I

The DG-I pump is a highly efficient chopper pump that is designed to pump heavily contaminated liquids as well as liquids with a high dry matter content.

All DG-I pumps are equipped with a knife system at the inlet to the pump, which ensures problem-free operation under conditions where many other pumps have problems with clogging.

APPLICATION EXAMPLES

- Sewage treatment plants
- Pump stations
- Biogas plants
- Food industry
- Pumping abrasive liquids or liquids with high viscosity



PUMP RPM

- 1,800 rpm
- 3,600 rpm

MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron AISI A48-40B
Pump housing	Cast iron AISI A48-40B
Pump impeller	Cast iron AISI A48-40B Cast iron AISI 100-70-03 (optional) Cast iron CF-8M (optional)
Pump shaft	AISI4340
Bolts	Steel AISI 316
Sealing system	Mechanical shaft seal: silicon carbide/silicon carbide
Knife system	Hardened steel A 570 GR 36 Acid-proof steel AISI 316 (optional)
Extended knife system	Hardened steel A 570 GR 36 (optional) Acid-proof steel AISI 316 (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

ELECTRICAL CABLE

Resistant to abrasion, oil and UV radiation.



Number of conductors:

SOOW 7AWG14

SOOW 10AWG10

7AWG8+3AWG16

23' (other lengths available upon request)

MONITORING FUNCTIONS

Bimetal thermal sensors 248 °F

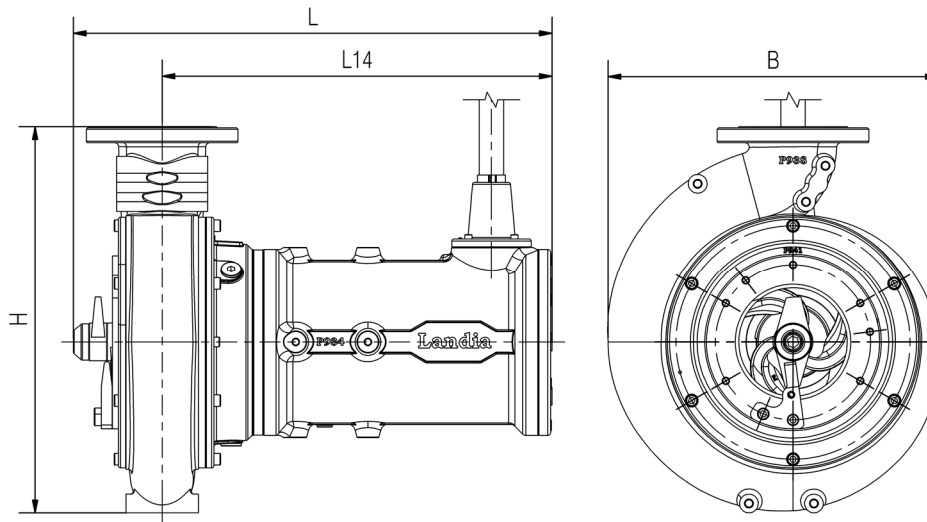
Moisture detection system (optional)

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]		[%]
Medium pressure								
DG-I 50 1.2 HP-1800 rpm	1.2	1710	2.3	460	Y	11	0.68	74.0
DG-I 65 3.6 HP-1800 rpm	3.6	1720	5.3	460	Y	34	0.75	81.0
DG-I 80 6.5 HP-1800 rpm	6.5	1735	9.0	460	Δ	66	0.78	85.0
DG-I 80 9.0 HP-1800 rpm	9.0	1745	11.0	460	Δ	72	0.88	86.0
DG-I 105 17.9 HP-1800 rpm	17.9	1755	22.0	460	Δ	152	0.84	88.4
DG-I 105 30.2 HP-1800 rpm	30.2	1760	36.0	460	Δ	241	0.85	90.0

OVERALL DIMENSIONS



Model	B [inch]	H [inch]	L [inch]	L14 [inch]	Weight [lb]
Medium pressure					
DG-I 50 1.2 HP-1800 rpm	9.8	11.4	14.2	11.4	55
DG-I 65 3.6 HP-1800 rpm	12.6	14.6	17.7	14.4	121
DG-I 80 6.5 HP-1800 rpm	14.6	17.0	21.7	17.5	187
DG-I 80 9.0 HP-1800 rpm	14.6	17.0	22.8	18.9	220
DG-I 105 17.9 HP-1800 rpm	18.1	21.0	26.2	21.3	353
DG-I 105 30.2 HP-1800 rpm	18.1	21.0	28.0	23.0	463

We reserve the right to make technical alterations.