

Landia



ChopperPump™



DG-I

Submersible Chopper Pump for Industrial Applications

A robust close-coupled submersible centrifugal pump with an integrated knife system for clog-free operation.

Optimized for viscous and abrasive slurries, it delivers reliable performance and a long service life in demanding applications.

Application Examples

- Wastewater treatment
- Pumping stations
- Biogas plants
- Food pulp
- Abrasive liquids
- High-viscosity liquids



Features and benefits

The pumps are single-stage centrifugal pumps with axial open sump inlet, and radial discharge.

The pumps have an integrated knife system for rag handling and clog-free operation in fibrous media. For finer chopping the knife system can be extended with more cutting edges on request. Further the pumps feature a special front- and backplate design which along with their specialised open impellers improves handling of difficult media.

Inlet and outlet flanges have hole patterns according to EN 1092-1 and ASME B16.5 with a maximum operating pressure of 6 bar.

The pumps are equipped with a double mechanical seal, separating pumped media and motor, in an oil-lubricated configuration for extended service life. These seals are designed for compatibility with demanding applications ensuring reliable performance in abrasive and challenging environments.

Quality assurance and testing

Manufactured in Denmark in accordance with ISO 9001. Each pump is tested prior to delivery by a routine Factory Acceptance Test verifying assembly, function and electrical integrity.

FAT includes motor test (IEC 60034-2-1), leakage test, dry run and dimensional inspection. Impellers are balanced to ISO 21940-11, Grade G6.3. FAT documentation with signed verification or certificates is available on request.

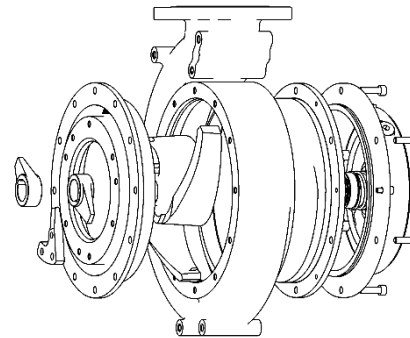
Optional tests: hydrostatic test (ISO 13709 / API 610), performance test (ISO 9906, Grade 3B), NPSH test, vibration and mech run tests.

Material certificates according to EN / ISO 10204 (Type 2.2) available on request.

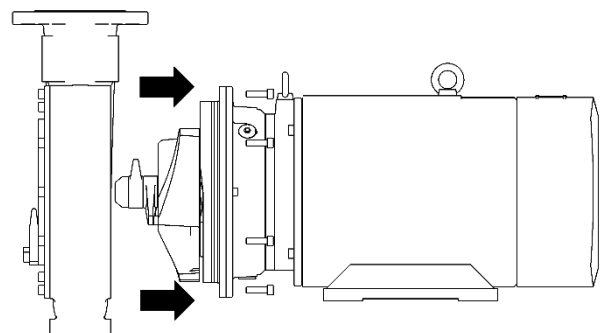
Maintenance

The pumps feature wear parts with increased wall thickness, ensuring long service life in abrasive media. Hardened materials can be opted for even more wear resistance.

The pumps are made with detachable wear parts, e.g. impeller, front- and backplate, which often see more wear, so selective wear part replacement is possible making renovation more cost effective.



The pumps are designed with a back pull-out feature which enables removal of the motor, oil chamber and impeller without dismounting the pump casing from its system connections.



All pumps in the series can be serviced by a single person with a crane. Lifting to be carried out using designated lifting points.

Service intervals

Oil change	Every 2,000 hours or once per year
Mechanical shaft seal	Check during oil change
Wear parts	Wear inspection every 6 months
Motor	Maintenance-free with lifetime-lubricated bearings

Materials

Motor housing and oil chamber	Cast iron EN-GJL-250
Pump casing	Cast iron EN-GJL-250 Hardened cast iron EN-GJS-700-2 (optional) W1.4408/SS316 (optional)*
Pump impeller	Cast iron EN-GJL-250 Hardened cast iron EN-GJS-700-2 (optional) W1.4408/SS316 (optional)
Knife system (optional)	Hardened steel W1.0577 W1.4404/SS316 (optional) Stavax W1.2083 / SS420 (opt)
Pump shaft	W1.6582/AISI4340 W1.4404/SS316 (optional)*
Bolts	A4
Mechanical shaft seals	Silicon carbide
Oil type	CRB Multi 15W-40 Hyspin AWH M 15 (optional) Hyspin HVI 46D (optional) Whitem. WOM 65 (optional)

*not available for DG-I 50 & DG-I 150.

Surface Treatment

Standard coating is a three-coat alkyd system with zinc phosphate pigmentation (EFAcombi AK 560 H2O).

As an option, a two-component epoxy coating can be applied (Sigmacover 350). Surfaces are prepared by degreasing and abrasive blasting to Sa 2½ according to ISO 8501-1.

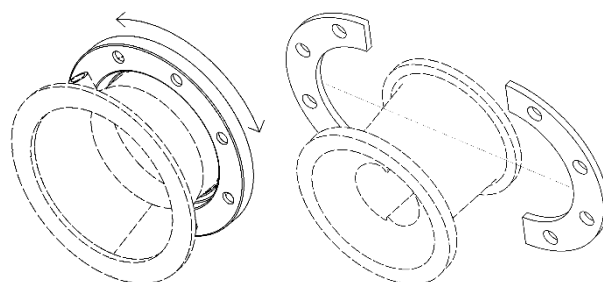
Stainless steel components are pickled and passivated.

Surface finish	ISO 12944 Class	Min. DFT	Colour
Alkyd system	C2	80 µm	RAL 9005
Epoxy coating	C4	240 µm	RAL 7005
Stainless steel	C5		

Flanges

The pumps are rated for a maximum operating pressure of 6 bar in accordance with ISO 5199 nominal pressure classification.

The pump discharge is provided with a fixed cast iron flange. Stainless steel adapters are fitted with pressed loose flanges, while cast adapters are fitted with split loose flanges.



Pressed loose flange

Split loose flange

Flange diameters and hole patterns comply with EN 1092-1 and ASME B16.5. Flange thicknesses are not standardized but optimized by Landia. Standardized flange thicknesses are available as an option on request.

The pump flanges withstand forces according to ISO 5199. However, piping shall be self-supporting and external loads on the flanges should be avoided to ensure proper operation and facilitate maintenance.

Electrical Cable

Pumps are equipped with a neoprene-sheathed cable which is oil- and UV-resistant. Cable design in accordance with DIN VDE 0282-4, with flexible conductors to IEC 60228 Class 5. Installation characteristics comply with DIN VDE 0298-3.

Shielded cables are available as an option for operation with frequency converters (VFD). Shielding reduces EMI, limits bearing currents and improves system compatibility.

Standard length 7 m (longer options available)

Cabletypes

H07RN-F 7G1.5 mm ²	≤ 5.5 kW (Not permitted in the UK)
H07RN-F 7G2.5 mm ²	≤ 5.5 kW (UK only)
S07RN-F 7G4+3x1.5 mm ²	≤ 18.5 kW
S07RN-F 7G6+3x1.5 mm ²	≤ 30.0 kW

Bearings

The pumps are equipped with sealed, grease-for-life rolling element bearings rated in accordance with ISO 281 and designed for a minimum L10 bearing life of 100,000 operating hours.

The bearing arrangement is maintenance-free and requires no periodic relubrication. High-temperature bearing configurations are available on request.

Noise and vibration levels

Vibration RMS levels for the pump at normal operation is within the limits of ISO 20816-1 Zone B/C.

The sound pressure level of the pumps at normal operation according to ISO 11201 is within the limiting values stated in EC Council directive 2006/42/EC relating to machinery.

Solid Passage Size

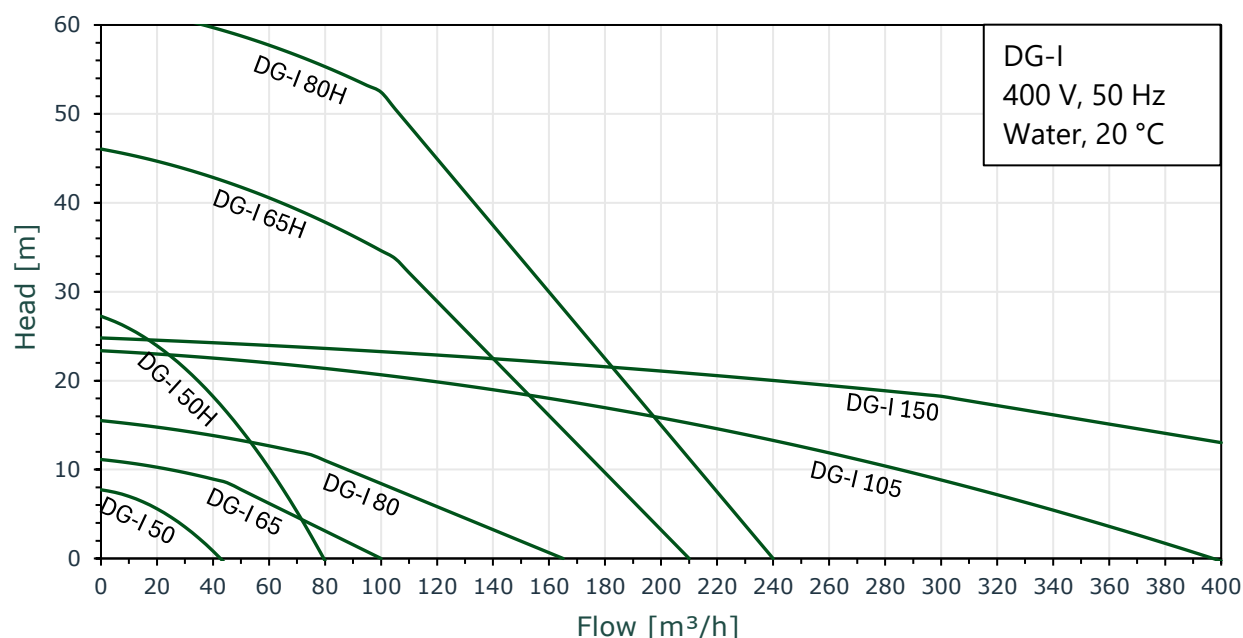
The pumps are designed to allow for the passage of large solid particles. The size of the allowable solid particles is called the ball passage size, and has flowing diameters for the different pumps*

DG-I 50	DG-I 65	DG-I 80	DG-I 105	DG-I 150
23 mm	28 mm	31 mm	40 mm	50 mm

**Pumps equipped with a knife system can handle even larger solid particles, as these are chopped before entering the pump.*

Performance data

The pumps are available with 2-pole and 4-pole motors. 2-pole versions are designated high-pressure ("H") models. Pumps have the following performance ranges. The pumps performance complies with curve tolerance ISO 9906 Grade 3B.



Operating limits

Medium temperature	0 - 60 °C*
Ambient temperature	-20 - 60 °C‡
Dry matter	0 - 12 %*
PH	5 - 14
Maximum operating pressure	6 bar
NPSHR	11 m**
Maximum installation depth	20 m*
Maximum starts per hour	15 *
VFD frequency	10 - 60 Hz*

* Limits may be adjusted on request

‡ Nominal motor rating at 40 °C

** Corresponds to 1 m suction head. If pump priming is properly facilitated and the medium is well defined, NPSHR may be adjusted on request.

Motor details

The pumps are powered by high-quality VEM Three-phase motors, with squirrel-cage rotors, mounted close-coupled in a submersible Landia motor housing. The pumps are available with both premium efficiency IE3 motors, or lighter non-classified motors. Standard motor rating is 400 V, 50 Hz. Motors are available for 230 V, 400 V and 690 V at 50 Hz, and 460 V and 480 V at 60 Hz, in accordance with EN 60038. Permissible voltage deviations follow IEC 60034-1.

Motors are designed for continuous use (S1) when submerged and intermittent use only (S3, 25%) when dry.

The motors are suitable for direct-on-line (DOL), soft starter and frequency converter (VFD) operation.

For VFD operation, the complete drive system, including cable selection and any required output filters, shall be designed to ensure compliance with the permissible voltage stresses defined in IEC 60034-17.

Enclosure class IP68 according to IEC 60034-5, enabling continuous operation fully submerged in the pumped medium.

Cooling

Motor must be submerged during continuous operation to have proper cooling condition. Unsubmerged operation is only possible intermittently.

The motors are fitted with Class F insulation according to IEC 60085 and have integrated bimetallic thermal protection embedded in the winding. The protector is of normally closed type direct temperature monitor, opening the circuit instantaneously at the rated switching

temperature of 120 °C and automatically resetting upon cooling.

Motors can optionally be fitted with PT100 temperature sensors for continuous temperature monitoring and external control system integration.

To limit thermal stress, operation should generally not exceed 15 starts per hour, depending on motor size and load conditions.

Motor rated power is specified as shaft output power (P2) in accordance with IEC / EN 60034-1. The motor therefore draws a higher electrical input power (P1) due to internal losses.

Motor power is rated at a medium/ambient temperature of 40 °C. Adjusted permissible output of the rated power varies with temperature as shown in the following table.

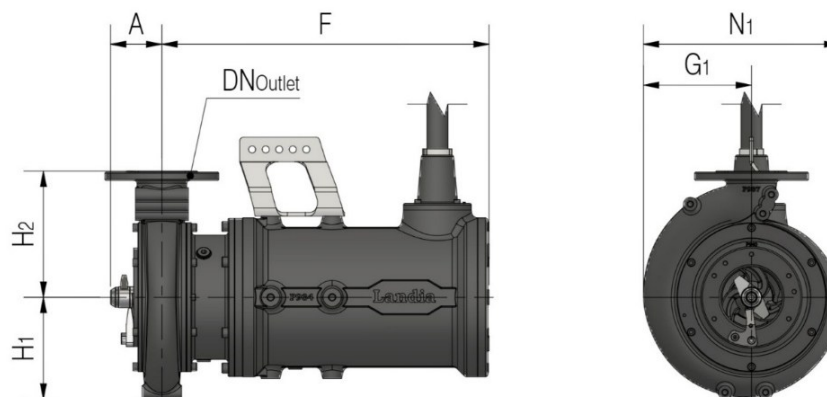
Ambient Temp °C	10	15	20	25	30	35	40	45	50	55	60	70
Thermal class F adjusted permissible output power	121%	117%	114%	110%	107%	103%	100%	95%	90%	85%	80%	68%

On request, Landia offers DG-I pumps with ATEX approval in accordance with Directive 2014/34/EU, Group II, Category 2G, Temperature Class T4, for use in gas atmospheres (Zone 1). Certified as Ex db h IIB T4 Gb.



DG-I Standard series

Standard submersible chopper pumps for general industrial pumping applications.



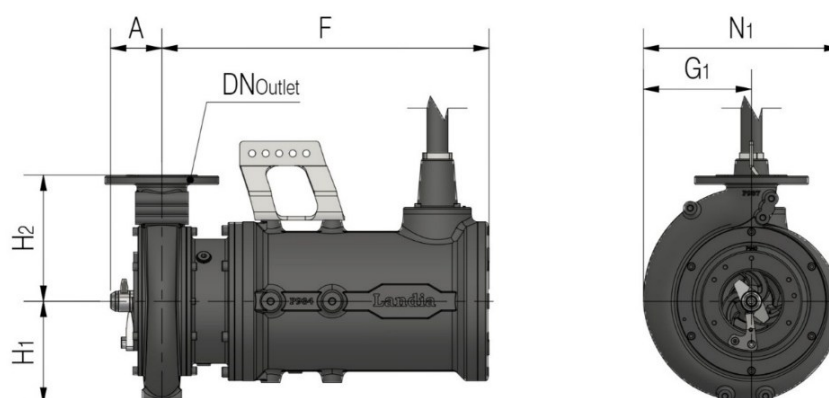
Model	DG-I 50	DG-I 65	DG-I 65	DG-I 65	DG-I 80	DG-I 80	DG-I 80
Nominal power [kW]	0.75	1.1	1.5	2.2	3	4	5.5
Designation	DG-I 50 0,75 kW-1500 rpm	DG-I 65 1,1 kW-1500 rpm	DG-I 65 1,5 kW-1500 rpm	DG-I 65 2,2 kW-1500 rpm	DG-I 80 3,0 kW-1500 rpm	DG-I 80 4,0 kW-1500 rpm	DG-I 80 5,5 kW-1500 rpm
Motor series	ms. 71	ms. 80	ms. 80	ms. 90	ms. 100	ms. 100	ms. 112
Motor speed [rpm]	1400	1410	1400	1410	1430	1435	1440
Nominal current @400 V 50 Hz [A]	2.1	2.6	3.4	5	6.7	8.8	11
Connection Y/Δ	Y	Y	Y	Y	Δ	Δ	Δ
Start current DOL [A]	10	14	19	30	43	61	68
cos phi	0.7	0.79	0.81	0.8	0.79	0.78	0.87
Efficiency [%]	73.6	76.7	78.6	80.2	82.4	84.1	84.6
Nominal Torque [N m]	5.1	7.5	10.2	14.9	20	26.6	36.5
Starting Torque [N m]	11.3	17.1	25.6	37.3	50.1	69.2	69.3
H ₁ [mm]	130	166	166	166	190	190	190
H ₂ [mm]	160	205	205	205	242	242	242
A [mm]	70	84	84	84	105	105	100
F [mm]	290	361	361	366	445	445	480
N ₁ [mm]	250	320	320	320	370	370	370
G ₁ [mm]	135	175	175	175	205	205	205
DN _{Outlet} bolt pattern	Ø50 DC90 M10 **DN 50 PN 10/16	DN 65 PN 10/16 & DN 65 PN 6 & ANSI 2.5"	DN 65 PN 10/16 & DN 65 PN 6 & ANSI 2.5"	DN 65 PN 10/16 & DN 65 PN 6 & ANSI 2.5"	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"
Type: Cast flange	**ANSI 2"						
Pressure rating PN6	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150
**as option with adapter							
Weight [kg]	25	45	50	55	80	85	100
Item no.	2314197	2314718	2314711	2314712	2314813	2314814	2314815

DG-I Standard series

Model	DG-I 105	DG-I 105	DG-I 105	DG-I 105	DG-I 150	DG-I 150
Nominal power [kW]	7.5	11	15	18.5	22	30
Designation	DG-I 105 7,5 kW-1500 rpm	DG-I 105 11,0 kW-1500 rpm	DG-I 105 15,0 kW-1500 rpm	DG-I 105 18,5 kW-1500 rpm	DG-I 150 22,0 kW-1500 rpm	DG-I 150 30,0 kW-1500 rpm
Motor series	ms. 132	ms. 132	ms. 160	ms. 160	ms. 180	ms. 180
Motor speed [rpm]	1455	1455	1465	1460	1465	1465
Nominal current @400 V 50 Hz [A]	15	21.5	29	35	43	57
Connection Y/Δ	Δ	Δ	Δ	Δ	Δ	Δ
Start current DOL [A]	90	146	212	238	280	399
cos phi	0.83	0.84	0.84	0.85	0.82	0.84
Efficiency [%]	86.2	87.9	88.7	89.3	90.1	90.7
Nominal Torque [N m]	49.2	72.2	97.8	121	143.4	195.6
Starting Torque [N m]	98.5	158.8	244.5	302.5	286.8	391.1
H₁ [mm]	234	234	234	234	294	294
H₂ [mm]	300	300	300	300	442	442
A [mm]	125	125	125	125	130	130
F [mm]	540	540	585	585	715	715
N₁ [mm]	460	460	460	460	580	580
G₁ [mm]	250	250	250	250	320	320
DN_{Outlet} bolt pattern Type: Cast flange Pressure rating PN6 **as option with adapter	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4" ASME B16.5 CL150	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4" ASME B16.5 CL150	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4" ASME B16.5 CL150	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4" ASME B16.5 CL150	DN 150 PN 10/16 & ANSI 4" ASME B16.5 CL150	DN 150 PN 10/16 & ANSI 4" ASME B16.5 CL150
Weight [kg]	150	160	200	210	325	350
Item no.	2314917	2314911	2314915	2314918	2314622	2314630

DG-I Premium efficiency series

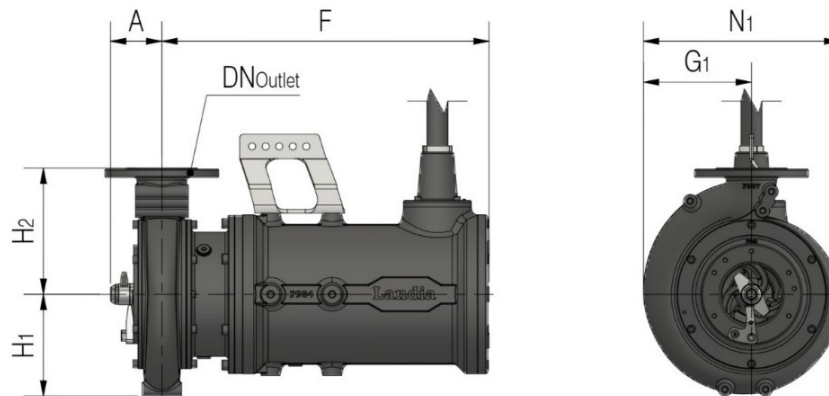
Standard pumps equipped with premium-efficiency IE3 motors for reduced energy consumption.



Model	DG-I 65	DG-I 80	DG-I 105	DG-I 105	DG-I 105
Nominal power [kW]	1.5	4	7.5	11	18.5
Designation	DG-I 65 1,5 kW-1500 rpm IE3	DG-I 80 4,0 kW-1500 rpm IE3	DG-I 105 7,5 kW-1500 rpm IE3	DG-I 105 11,0 kW-1500 rpm IE3	DG-I 105 18,5 kW-1500 rpm IE3
Motor series	ms. 100	ms. 112	ms. 132	ms. 160	ms. 180
Motor speed [rpm]	1455	1465	1470	1465	1475
Nominal current @400 V 50 Hz [A]	3.4	7.9	16	21	34.5
Connection Y/Δ	Y	Δ	Δ	Δ	Δ
Start current DOL [A]	32.3	74.3	122	147	269
cos phi	0.75	0.82	0.75	0.82	0.84
Efficiency [%]	85.3	88.6	90.5	91.4	92.6
Nominal Torque [N m]	9.8	26.1	48.7	71.7	119.8
Starting Torque [N m]	44.3	78.2	146.2	164.9	347.4
H ₁ [mm]	166	190	234	234	234
H ₂ [mm]	205	242	300	300	300
A [mm]	83	135	125	125	125
F [mm]	437	445	540	585	687
N ₁ [mm]	320	370	460	460	460
G ₁ [mm]	175	205	250	250	250
DN _{Outlet} bolt pattern	DN 65 PN 10/16	DN 80 PN 10/16	DN 100 PN 10/16	DN 100 PN 10/16	DN 100 PN 10/16
Type: Cast flange	& DN 65 PN 6	& DN 80 PN 6	& DN 100 PN 6	& DN 100 PN 6	& DN 100 PN 6
Pressure rating PN6	& ANSI 2.5"	& ANSI 3"	& ANSI 4"	& ANSI 4"	& ANSI 4"
**as option with adapter	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150
Weight [kg]	75	101	156	189	288
Item no.	2364711	2364814	2364917	2364911	2364918

DG-I High Pressure series

High-speed versions for applications requiring increased head and discharge pressure.



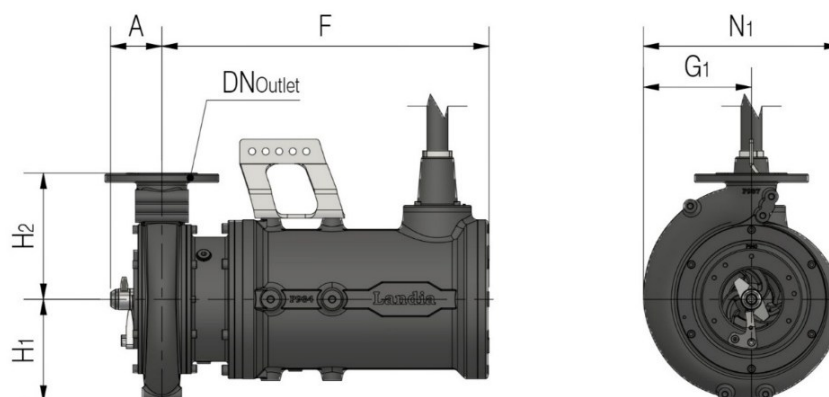
Model	DG-I 50H	DG-I 50H	DG-I 50H	DG-I 65H	DG-I 65H	DG-I 65H	DG-I 65H
Nominal power [kW]	3	4	5.5	7.5	11	15	18.5
Designation	DG-I 50 3,0 kW-3000 rpm	DG-I 50 4,0 kW-3000 rpm	DG-I 50 5,5 kW-3000 rpm	DG-I 65 7,5 kW-3000 rpm	DG-I 65 11,0 kW-3000 rpm	DG-I 65 15,0 kW-3000 rpm	DG-I 65 18,5 kW-3000 rpm
Motor series	ms. 90	ms. 100	ms. 100	ms. 112	ms. 132	ms. 160	ms. 160
Motor speed [rpm]	2865	2900	2860	2890	2905	2940	2925
Nominal current @400 V 50 Hz [A]	6.2	8.4	11	15	20.5	27.5	33
Connection Y/Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Start current DOL [A]	42	59	61	99	143	195	238
cos phi	0.85	0.81	0.86	0.85	0.88	0.89	0.9
Efficiency [%]	82.8	84.9	84.7	86.1	87.6	88.7	89.9
Nominal Torque [N m]	10	13.2	18.4	24.8	36.2	48.7	60.4
Starting Torque [N m]	24	29	44.1	37.2	86.8	107.2	126.8
H ₁ [mm]	130	130	130	166	166	166	166
H ₂ [mm]	160	160	160	205	205	205	205
A [mm]	70	75	75	85	85	80	80
F [mm]	370	430	430	470	535	580	580
N ₁ [mm]	250	250	250	320	320	320	320
G ₁ [mm]	135	135	135	175	175	175	175
DN _{Outlet} bolt pattern	Ø50 DC90 M10	Ø50 DC90 M10	Ø50 DC90 M10	DN 65 PN	DN 65 PN	DN 65 PN	DN 65 PN
Type: Cast flange	**DN 50 PN	**DN 50 PN	**DN 50 PN	10/16	10/16	10/16	10/16
Pressure rating PN6	10/16	10/16	10/16	& DN 65 PN 6	& DN 65 PN 6	& DN 65 PN 6	& DN 65 PN 6
**as option with adapter	**ANSI 2"	**ANSI 2"	**ANSI 2"	& ANSI 2.5"	& ANSI 2.5"	& ANSI 2.5"	& ANSI 2.5"
	ASME B16.5	ASME B16.5	ASME B16.5	ASME B16.5	ASME B16.5	ASME B16.5	ASME B16.5
	CL150	CL150	CL150	CL150	CL150	CL150	CL150
Weight [kg]	43	55	60	80	105	140	155
Item no.	2312103	2312104	2312105	2312717	2312711	2312715	2312718

DG-I High Pressure series

Model	DG-I 80H	DG-I 80H	DG-I 80H	DG-I 80H
Nominal power [kW]	15	18.5	22	30
Designation	DG-I 80 15,0 kW-3000 rpm	DG-I 80 18,5 kW-3000 rpm	DG-I 80 22,0 kW-3000 rpm	DG-I 80 30,0 kW-3000 rpm
Motor series	ms. 160	ms. 160	ms. 180	ms. 180
Motor speed [rpm]	2940	2925	2935	2940
Nominal current @400 V 50 Hz [A]	27.5	33	39	52.5
Connection Y/Δ	Δ	Δ	Δ	Δ
Start current DOL [A]	195	238	265	383
cos phi	0.89	0.9	0.9	0.91
Efficiency [%]	88.7	89.9	90.5	90.6
Nominal Torque [N m]	48.7	60.4	71.6	97.4
Starting Torque [N m]	107.2	126.8	121.7	194.9
H₁ [mm]	190	190	190	190
H₂ [mm]	242	242	242	242
A [mm]	102	102	102	102
F [mm]	587	587	703	703
N₁ [mm]	370	370	390	390
G₁ [mm]	205	205	205	205
DN_{Outlet} bolt pattern	DN 80 PN 10/16	DN 80 PN 10/16	DN 80 PN 10/16	DN 80 PN 10/16
Type: Cast flange	& DN 80 PN 6	& DN 80 PN 6	& DN 80 PN 6	& DN 80 PN 6
Pressure rating PN6	& ANSI 3"	& ANSI 3"	& ANSI 3"	& ANSI 3"
**as option with adapter	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150
Weight [kg]	175	185	254	276
Item no.	2312815	2312818	2312822	2312830

DGER-I Stainless steel Hybrid series

Hybrid construction with stainless steel wetted parts and coated cast-iron motor section for improved corrosion resistance.



Model	DGER-I 80	DGER-I 80	DGER-I 80	DGER-I 105	DGER-I 105	DGER-I 105	DGER-I 105
Nominal power [kW]	3	4	5.5	7.5	11	15	18.5
Designation	DGER-I 80 3,0 kW-1500 rpm	DGER-I 80 4,0 kW-1500 rpm	DGER-I 80 5,5 kW-1500 rpm	DGER-I 105 7,5 kW-1500 rpm	DGER-I 105 11,0 kW-1500 rpm	DGER-I 105 15,0 kW-1500 rpm	DGER-I 105 18,5 kW-1500 rpm
Motor series	ms. 100	ms. 100	ms. 112	ms. 132	ms. 132	ms. 160	ms. 160
Motor speed [rpm]	1430	1435	1440	1455	1455	1465	1460
Nominal current @400 V 50 Hz [A]	6.7	8.8	11	15	21.5	29	35
Connection Y/Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Start current DOL [A]	43	61	68	90	146	212	238
cos phi	0.79	0.78	0.87	0.83	0.84	0.84	0.85
Efficiency [%]	82.4	84.1	84.6	86.2	87.9	88.7	89.3
Nominal Torque [N m]	20	26.6	36.5	49.2	72.2	97.8	121
Starting Torque [N m]	50.1	69.2	69.3	98.5	158.8	244.5	302.5
H ₁ [mm]	190	190	190	234	234	234	234
H ₂ [mm]	242	242	242	300	300	300	300
A [mm]	105	105	100	125	125	125	125
F [mm]	445	445	480	540	540	585	585
N ₁ [mm]	370	370	370	460	460	460	460
G ₁ [mm]	205	205	205	250	250	250	250
DN _{Outlet} bolt pattern	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"	DN 80 PN 10/16 & DN 80 PN 6 & ANSI 3"	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4"	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4"	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4"	DN 100 PN 10/16 & DN 100 PN 6 & ANSI 4"
Type: Cast flange Pressure rating PN6 **as option with adapter	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150	ASME B16.5 CL150
Weight [kg]	84	89	104	155	165	205	215
Item no.	2314283	2314284	2314286	2314287	2314281	2314285	2314288

DGER-I Stainless steel Hybrid High Pressure series

High-pressure hybrid versions combining corrosion-resistant wetted parts with increased head capability.

Model	DGER-I 80H
Nominal power [kW]	18.5
Designation	DGER-I 80 18,5 kW-3000 rpm
Motor series	ms. 160
Motor speed [rpm]	2925
Nominal current @400 V 50 Hz [A]	33
Connection Y/Δ	Δ
Start current DOL [A]	238
cos phi	0.9
Efficiency [%]	89.9
Nominal Torque [N m]	60.4
Starting Torque [N m]	126.8
H₁ [mm]	190
H₂ [mm]	242
A [mm]	102
F [mm]	587
N₁ [mm]	370
G₁ [mm]	205
DN_{Outlet} bolt pattern	DN 80 PN 10/16
Type: Cast flange	& DN 80 PN 6
Pressure rating PN6	& ANSI 3"
**as option with adapter	ASME B16.5 CL150
Weight [kg]	185
Item no.	2312288