

DGF**motralec**

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Set-back Vortex impeller



General characteristics

- Set-back vortex impeller
- 0,55 ÷ 1,5 kW motor power
- 2 / 4 poles
- delivery port GAS 1 1/2" ÷ 2 1/2" vertical
DN65-DN80 horizontal
- max 80 mm free passage

Electromechanical assembly

Electromechanical assembly in GJL-250 cast iron, for submerged operation. Seal set comprising 2 (two) silicon carbide mechanical seals assembled opposing in inspectable oil sump. Ecological dry motor. Separate pump body. Series with explosion-proof certification.

Applications

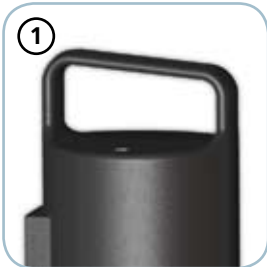
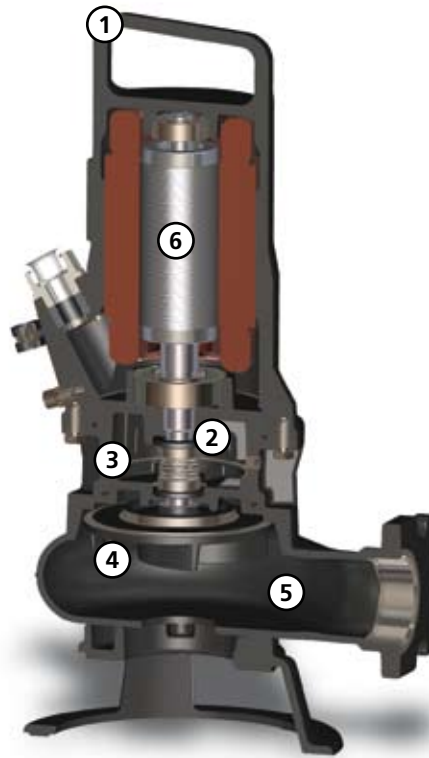
Specifically developed for use where there are traces of flammable liquids or in potentially explosive atmospheres, the DRF is used where the use of ordinary submersible electric pumps would not be possible. The main sectors of use are industrial and for the removal of landfill percolates and soiled biological liquids.

Construction materials

Case	Cast Iron EN-GJL 250
Impeller	Cast iron EN-GJL-250
Nuts and bolts	Stainless Steel - Class A2-70
Standard gasket	Rubber - NBR - VITON
Shaft	Stainless Steel - AISI 420
Set of standard mechanical seals	Two Silicon carbide mechanical seals (2SiC)

operating limits

Maximum operating temperature	40 °C
PH of treated fluid	6 to 10 pH
Viscosity of treated fluid	1 mm ² /s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm ³
Maximum acoustic pressure	70 dB
max starts per hour	20



Handle/Cable gland

Cast iron lifting and carrying handle. The GAS thread ring-nut can be removed to fix a rigid or flexible duct to the cable gland to protect the power supply cable



Mechanical seals

Two mechanical seals in silicon carbide (2SiC)



Oil sump

Large oil sump to guarantee longer mechanical seal lifetime



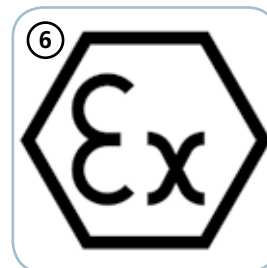
Drive shaft

Impeller connected to the drive shaft by means of tapered coupling



Free passage

Ample free passage allowing the expulsion of solids and preventing fouling of the impeller



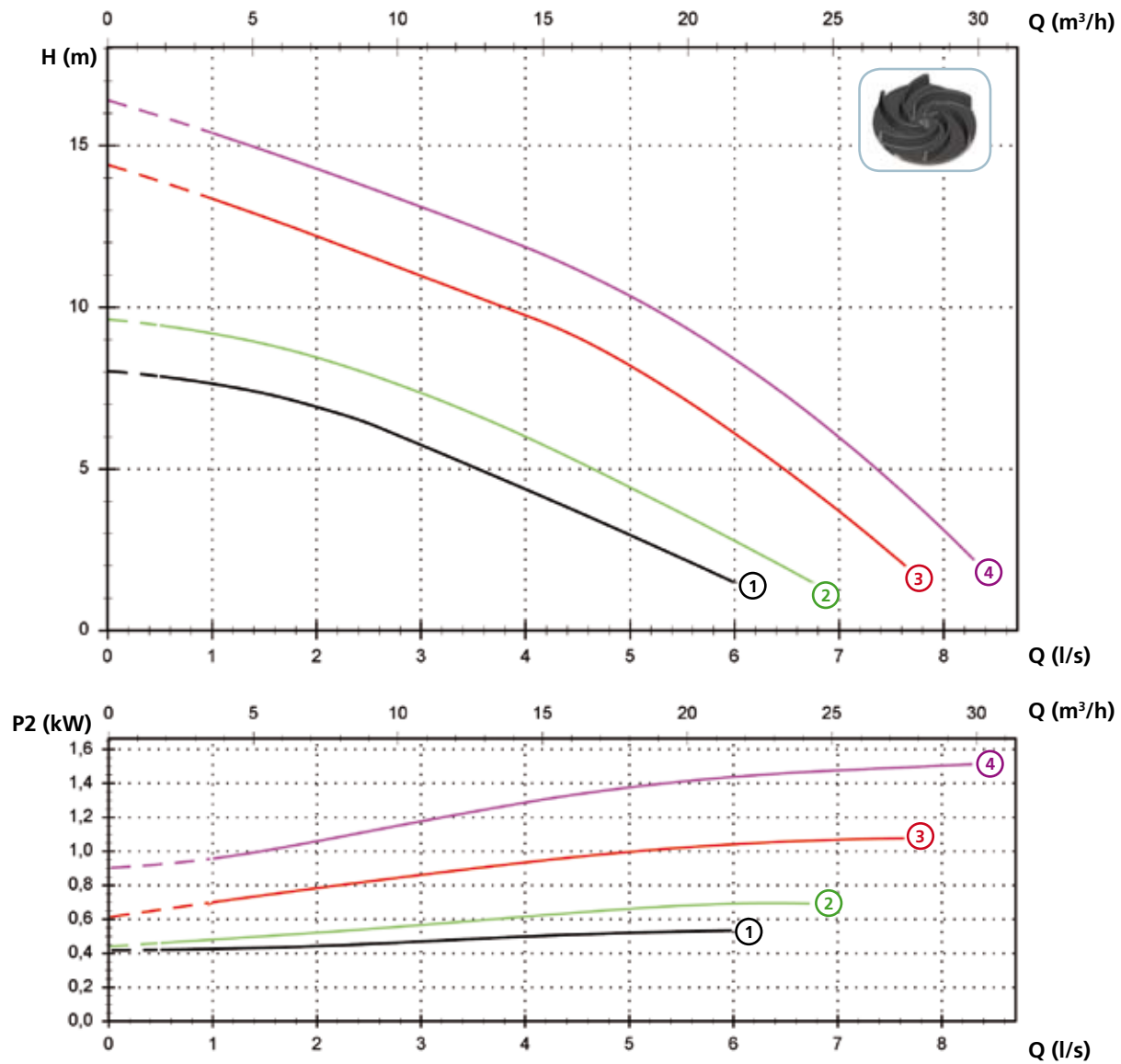
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Models with ATEX certification, suitable for installation in the presence of potentially explosive gases, powders and liquids

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Models with vertical GAS 1 1/2" threaded delivery port - 2 poles

Performances



Technical data

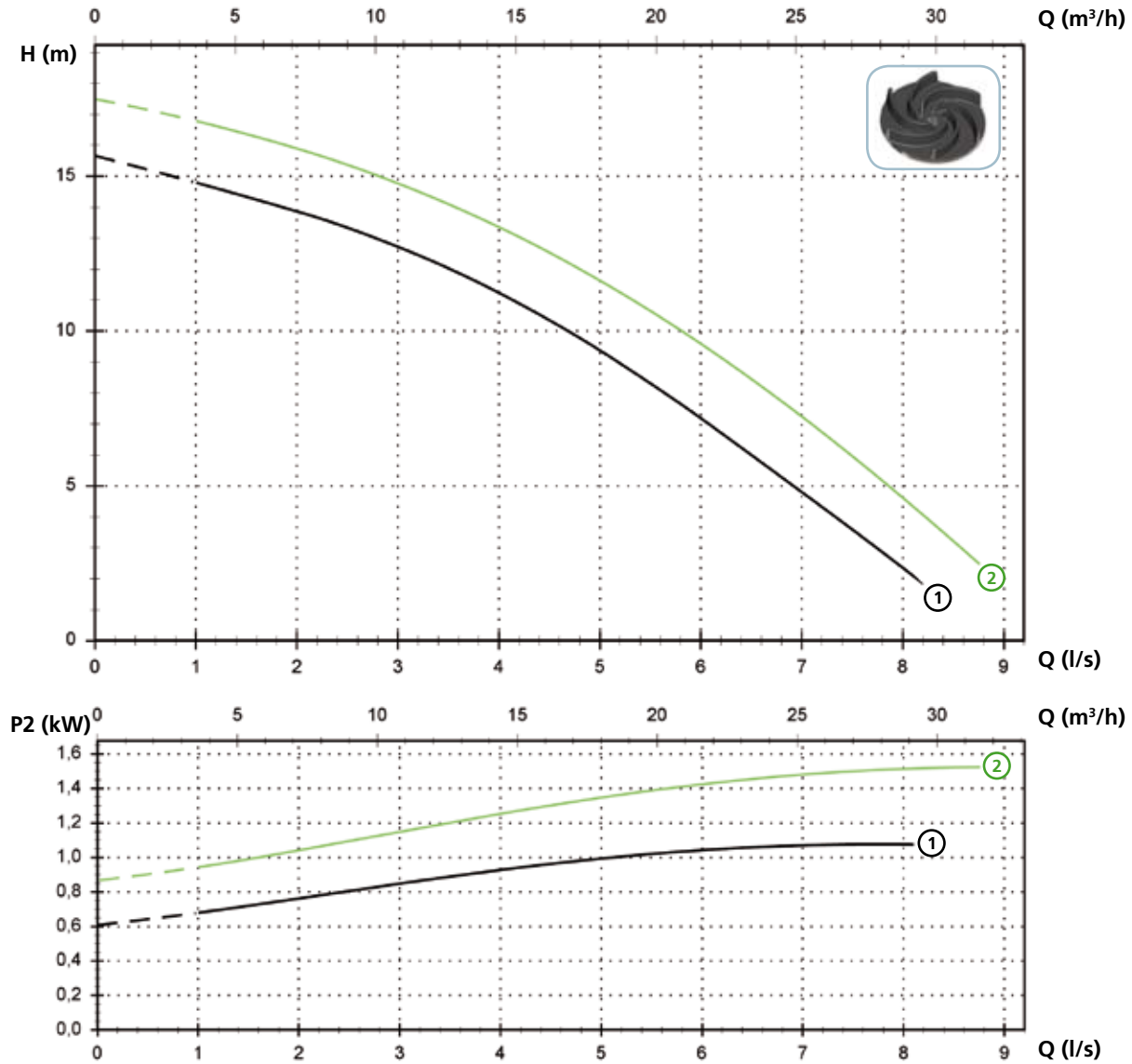
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
①	DGF 75/2/G40V A1CM/50	230	1	0.9	0.55	3.9	2900	G 1 1/2"	A	40 mm
②	DGF 100/2/G40V A1CM/50	230	1	1.1	0.74	4.9	2900	G 1 1/2"	A	40 mm
③	DGF 150/2/G40V A1CM/50	230	1	1.6	1.1	7.2	2900	G 1 1/2"	A	40 mm
④	DGF 200/2/G40V A1CM/50	230	1	2.2	1.5	9.8	2900	G 1 1/2"	A	40 mm

		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
①	DGF 75/2/G40V A1CT/50	400	3	0.8	0.55	1.5	2900	G 1 1/2"	A	40 mm
②	DGF 100/2/G40V A1CT/50	400	3	1.1	0.74	1.9	2900	G 1 1/2"	A	40 mm
③	DGF 150/2/G40V A1CT/50	400	3	1.7	1.1	2.9	2900	G 1 1/2"	A	40 mm
④	DGF 200/2/G40V A1CT/50	400	3	2.1	1.5	3.7	2900	G 1 1/2"	A	40 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

Models with horizontal GAS 1 1/2" threaded - DN32 PN6 flanged delivery port - 2 poles

Performances



Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage	
①	DGF 150/2/G40H A1CM/50	230	1	1.6	1.1	7.2	2900	G 1 1/2" - DN32 PN6	A	40 mm
②	DGF 200/2/G40H A1CM/50	230	1	2.2	1.5	9.8	2900	G 1 1/2" - DN32 PN6	A	40 mm

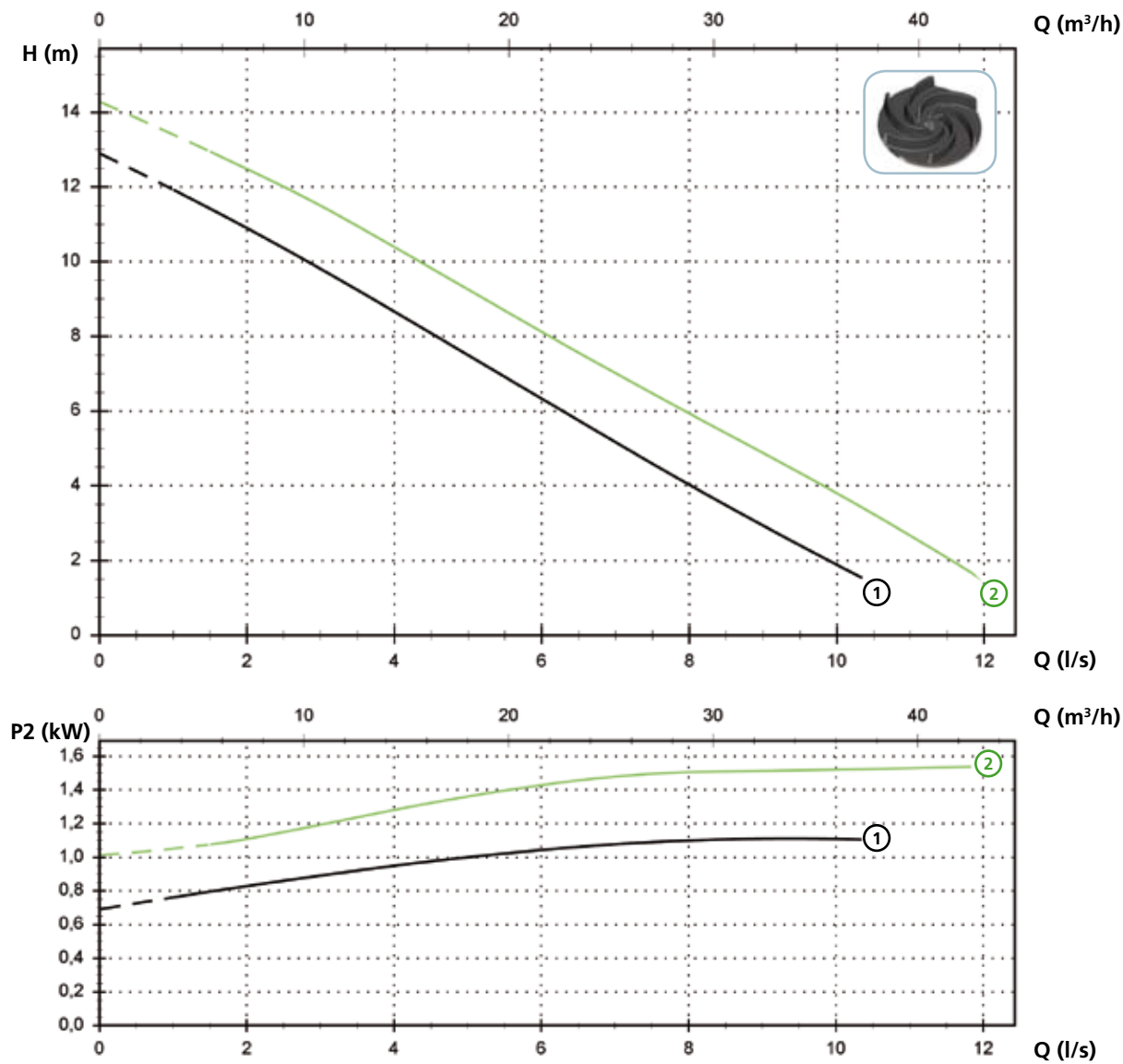
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage	
①	DGF 150/2/G40H A1CT/50	400	3	1.7	1.1	2.9	2900	G 1 1/2" DN32 PN6	A	40 mm
②	DGF 200/2/G40H A1CT/50	400	3	2.1	1.5	3.7	2900	G 1 1/2" DN32 PN6	A	40 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

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Models with vertical GAS 2" threaded delivery port - 2 poles

Performances



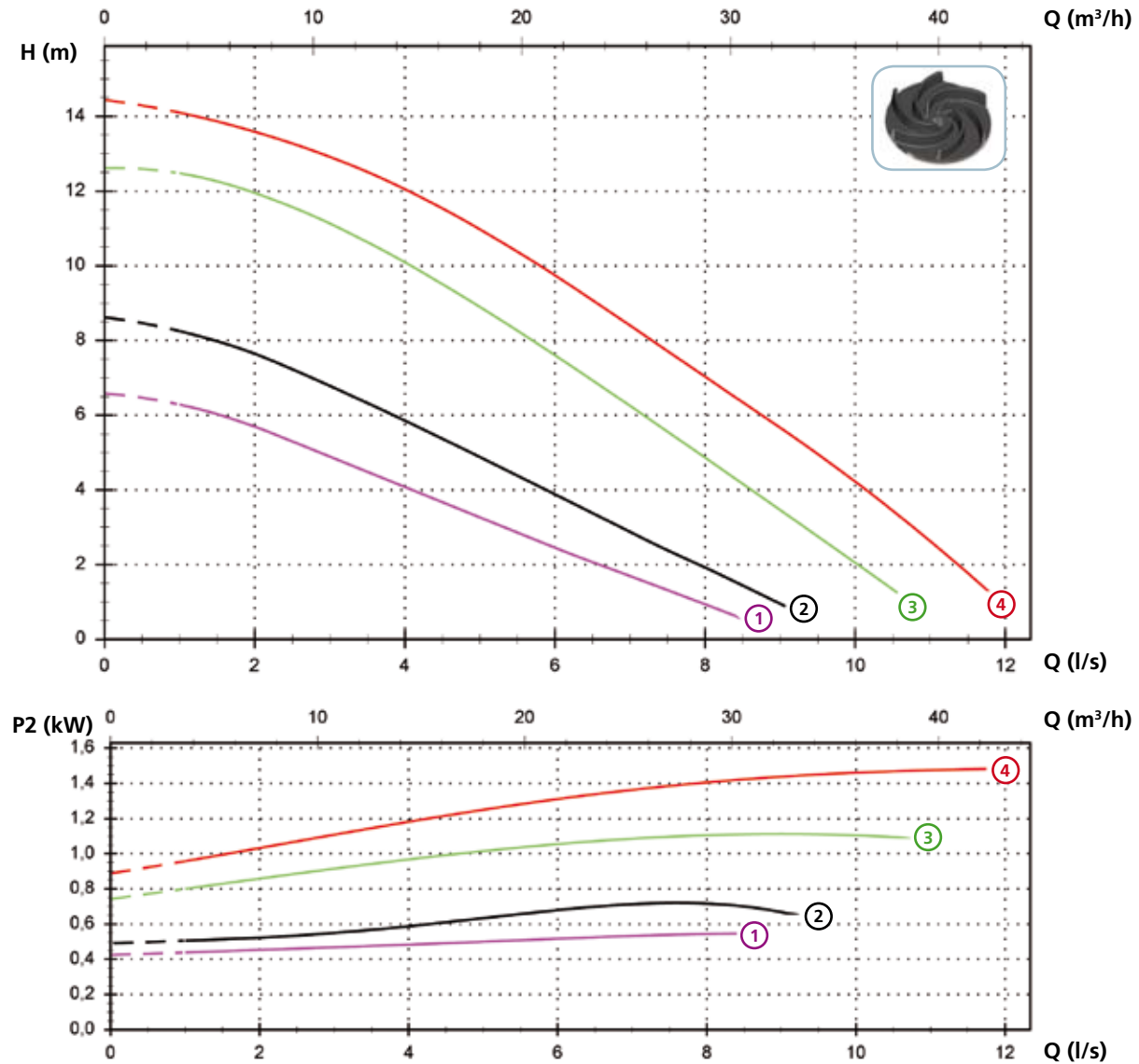
Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/G50V A1CM/50	230	1	1.6	1.1	7.2	2900	G 2"	A	50 mm
② DGF 200/2/G50V A1CM/50	230	1	2.2	1.5	9.8	2900	G 2"	A	50 mm
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/G50V A1CT/50	400	3	1.7	1.1	2.9	2900	G 2"	A	50 mm
② DGF 200/2/G50V A1CT/50	400	3	2.1	1.5	3.7	2900	G 2"	A	50 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

Models with horizontal GAS 2" threaded - DN50 PN10-16 flanged delivery port - 2 poles

Performances



Technical data

		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
①	DGF 75/2/G50H A1CM/50	230	1	0.8	0.55	3.9	2900	G 2" - DN50 PN10-16	A	50 mm
②	DGF 100/2/G50H A1CM/50	230	1	1.1	0.74	4.9	2900	G 2" - DN50 PN10-16	A	50 mm
③	DGF 150/2/G50H A1CM/50	230	1	1.6	1.1	7.2	2900	G 2" - DN50 PN10-16	A	50 mm
④	DGF 200/2/G50H A1CM/50	230	1	2.2	1.5	9.8	2900	G 2" - DN50 PN10-16	A	50 mm

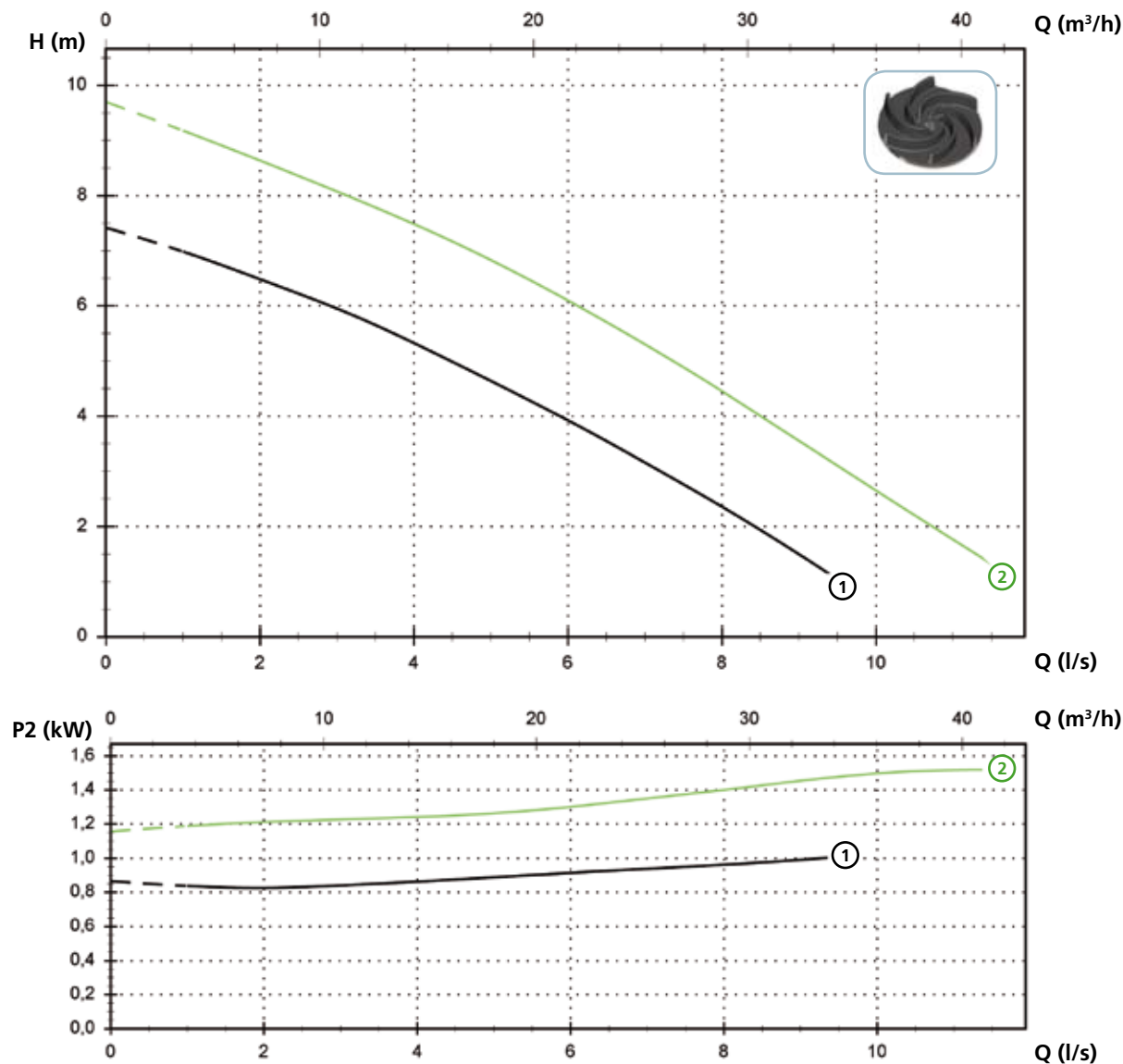
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
①	DGF 75/2/G50H A1CT/50	400	3	0.8	0.55	1.5	2900	G 2" - DN50 PN10-16	A	50 mm
②	DGF 100/2/G50H A1CT/50	400	3	1.1	0.74	1.9	2900	G 2" - DN50 PN10-16	A	50 mm
③	DGF 150/2/G50H A1CT/50	400	3	1.7	1.1	2.9	2900	G 2" - DN50 PN10-16	A	50 mm
④	DGF 200/2/G50H A1CT/50	400	3	2.1	1.5	3.7	2900	G 2" - DN50 PN10-16	A	50 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

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Models with vertical GAS 2 1/2" threaded delivery port - 2 poles

Performances



Technical data

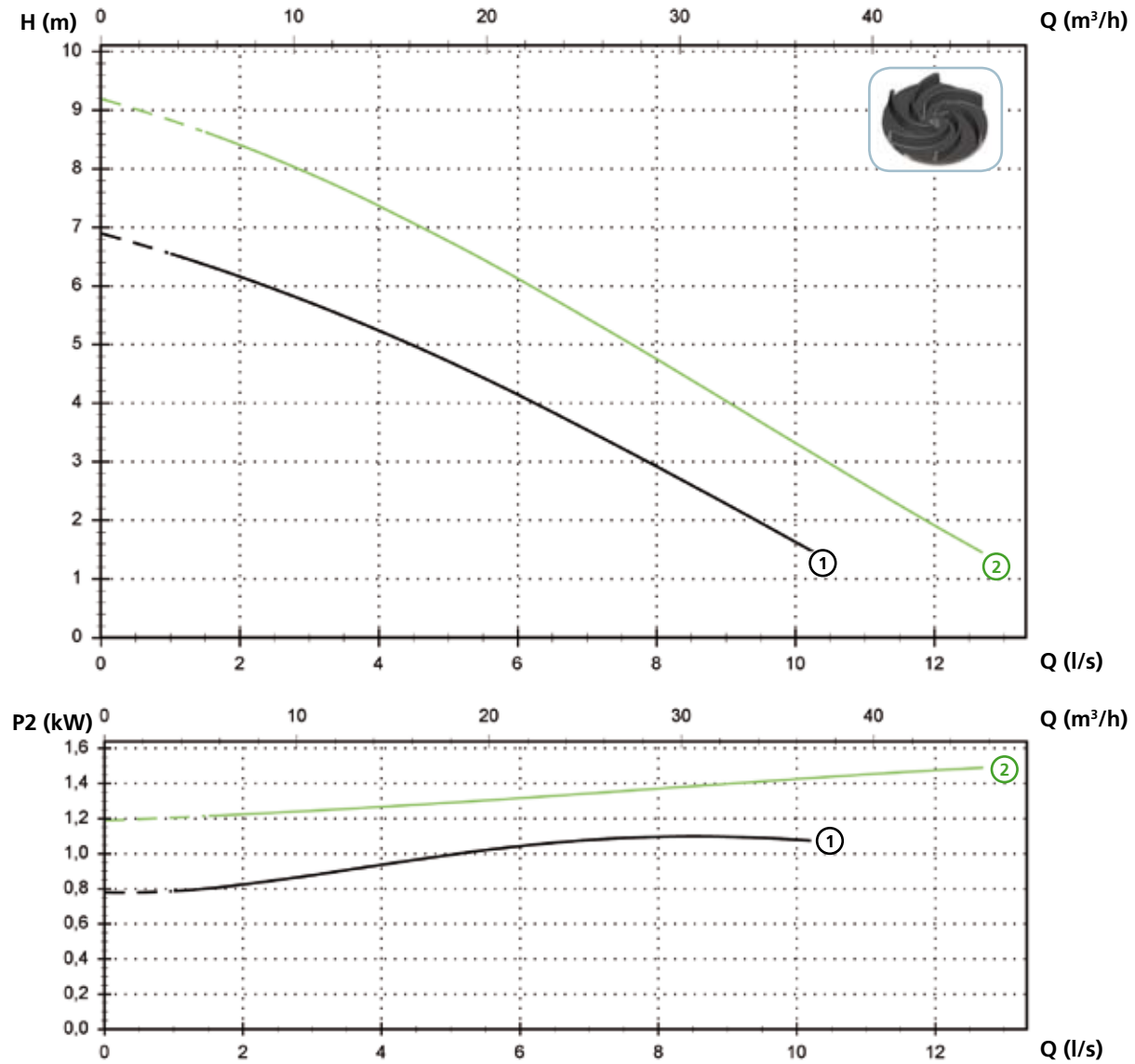
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/G65V A1CM/50	230	1	1.6	1.1	7.2	2900	G 2 1/2"	A	65 mm
② DGF 200/2/G65V A1CM/50	230	1	2.2	1.5	9.8	2900	G 2 1/2"	A	65 mm

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/G65V A1CT/50	400	3	1.7	1.1	2.9	2900	G 2 1/2"	A	65 mm
② DGF 200/2/G65V A1CT/50	400	3	2.1	1.5	3.7	2900	G 2 1/2"	A	65 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

Models with horizontal DN65 PN10-16 flanged delivery port - 2 poles

Performances



Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/65 A1CM/50	230	1	1.6	1.1	7.2	2900	DN65 PN10-16	A	65 mm
② DGF 200/2/65 A1CM/50	230	1	2.2	1.5	9.8	2900	DN65 PN10-16	A	65 mm

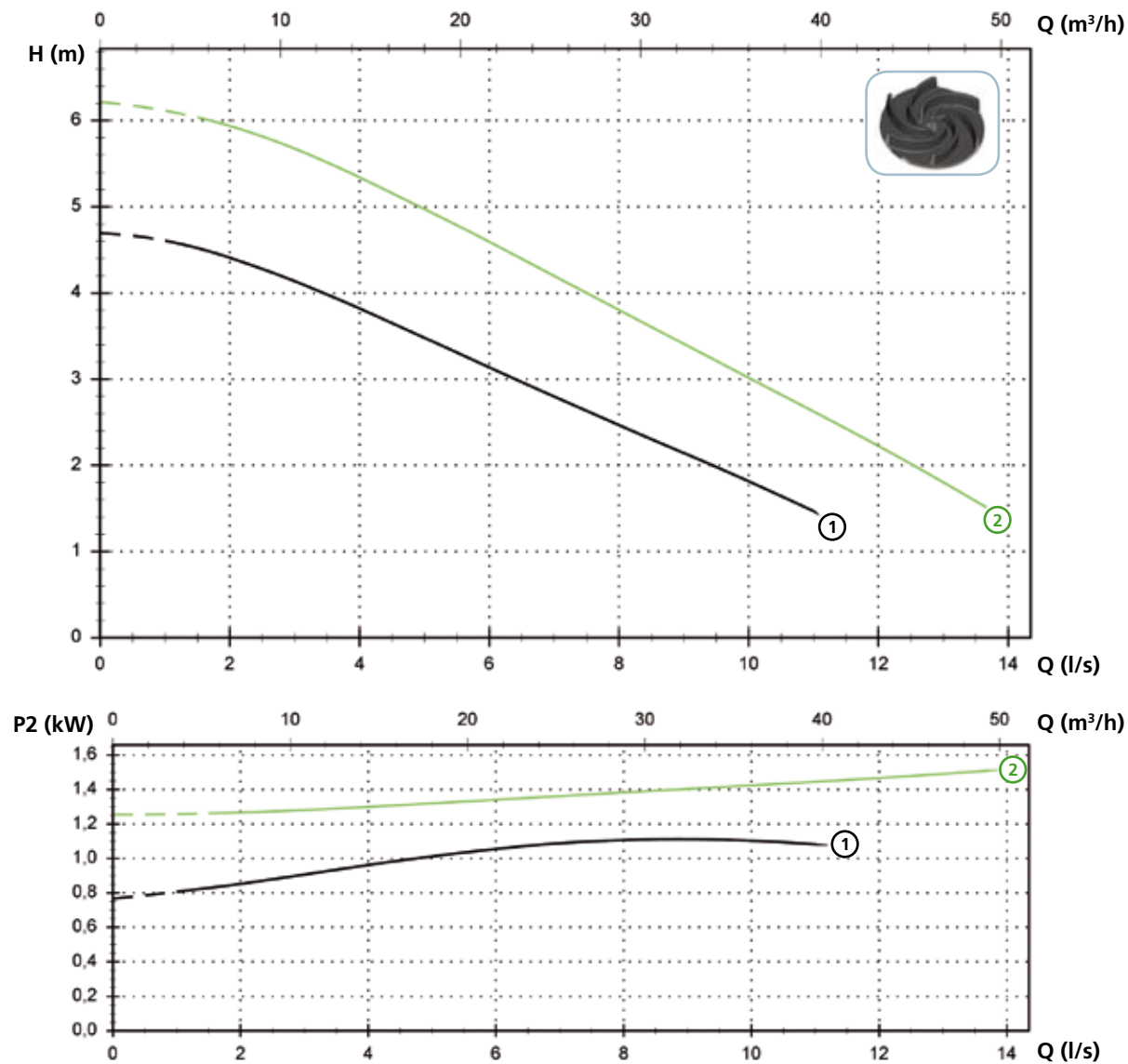
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/65 A1CT/50	400	3	1.7	1.1	2.9	2900	DN65 PN10-16	A	65 mm
② DGF 200/2/65 A1CT/50	400	3	2.1	1.5	3.7	2900	DN65 PN10-16	A	65 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

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Models with horizontal DN80 PN10-16 flanged delivery port - 2 poles

Performances



Technical data

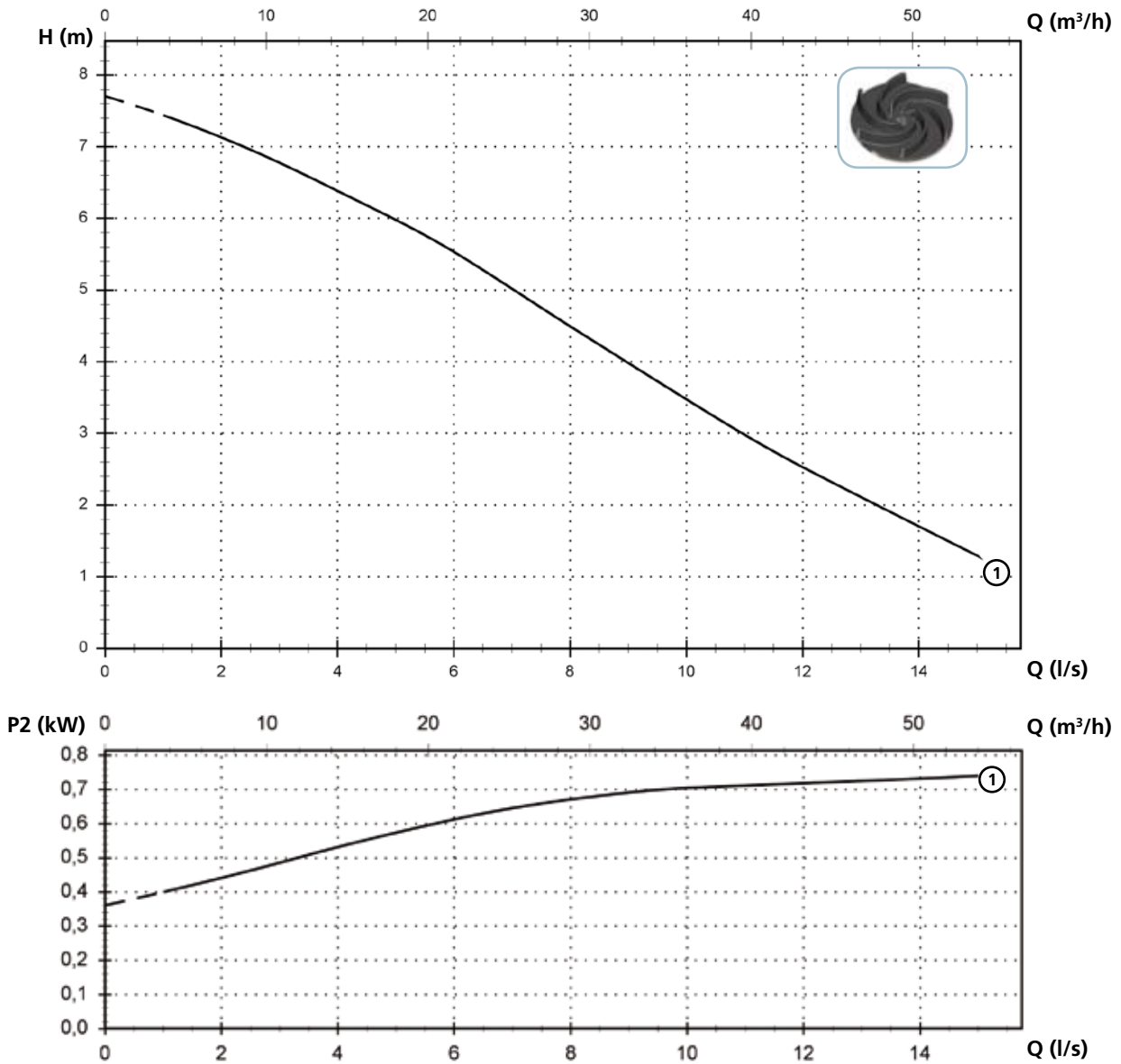
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/80 A1CM/50	230	1	1.6	1.1	7.2	2900	DN80 PN10-16	A	80 mm
② DGF 200/2/80 A1CM/50	230	1	2.2	1.5	9.8	2900	DN80 PN10-16	A	80 mm

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 150/2/80 A1CT/50	400	3	1.7	1.1	2.9	2900	DN80 PN10-16	A	80 mm
② DGF 200/2/80 A1CT/50	400	3	2.1	1.5	3.7	2900	DN80 PN10-16	A	80 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

Models with horizontal DN65 PN10-16 flanged delivery port - 4 poles

Performances



Technical data

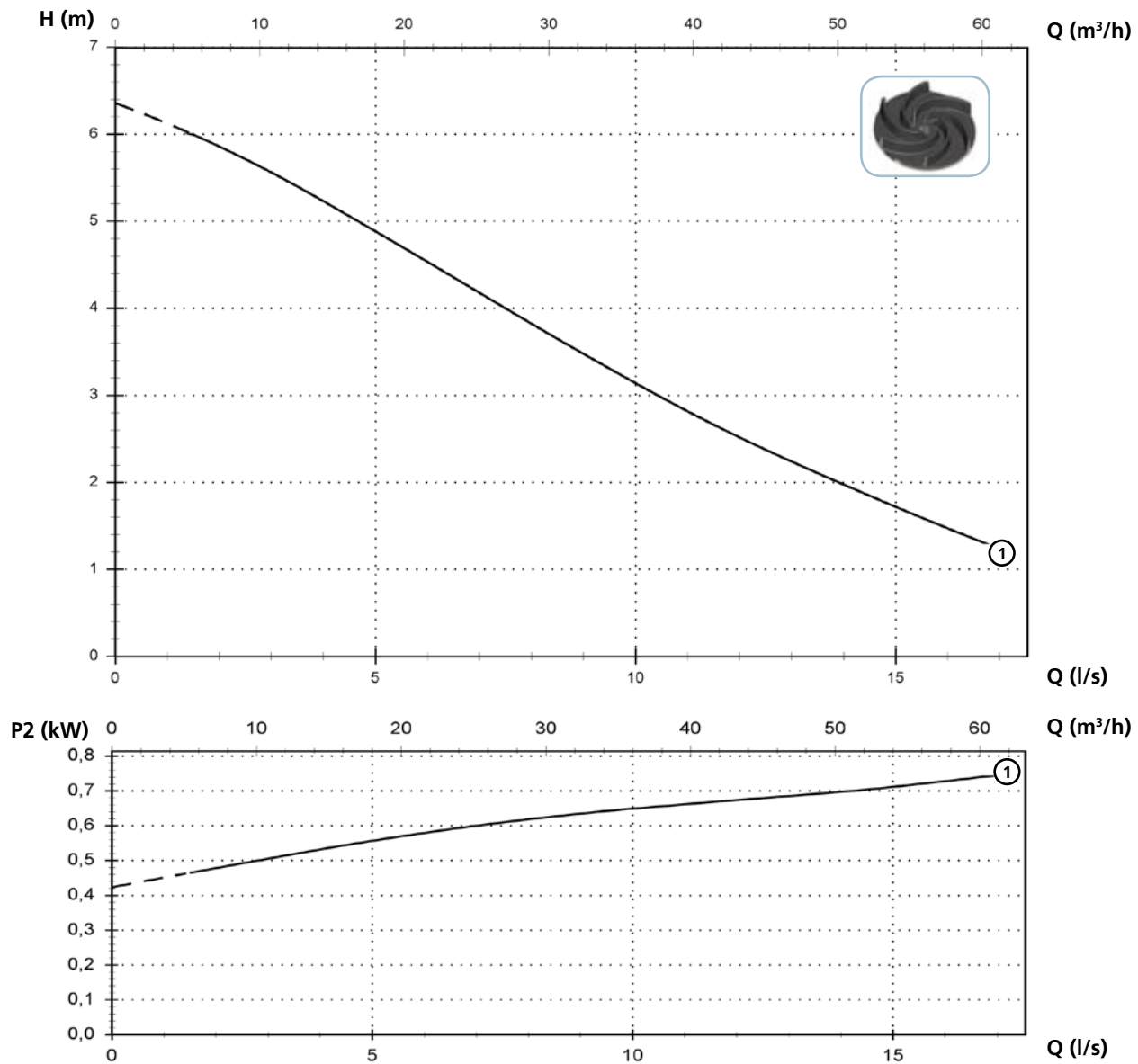
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 100/4/65 A1CT/50	400	3	1.1	0.74	2.2	1450	DN65 PN10-16	A	65 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

DFG

Models with horizontal DN80 PN10-16 flanged delivery port - 4 poles

Performances



Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Ø	Cable (*)	Free passage
① DGF 100/4/80 A1CT/50	400	3	1.1	0.74	2.1	1450	DN80 PN10-16	A	65 mm

(*) A = NSSHOU-J 4G1.5+2x0.75 - 10 m

Versions available

(Key to versions on page 15)

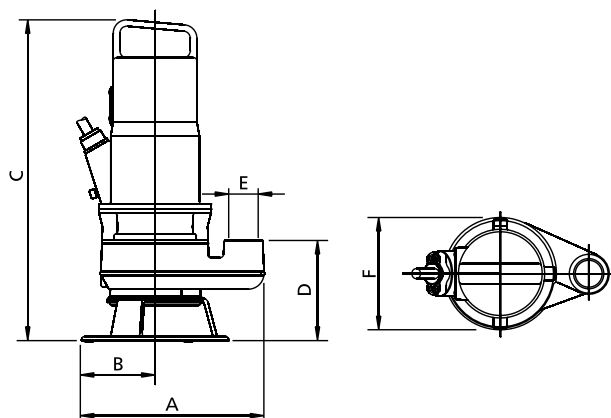
	Electrical variants													Cooling		Mechanical seals				
	N A E	T	T C	T C D	T C D T	T C D G T	T C G	T C S T	T C S G T	T S	T R	T R G	F T	C G F T	N	CC	2SIC	SICM	SICAL	2SICAL
DGF 75/2/G40V A1CM/50			●												●		●			
DGF 100/2/G40V A1CM/50			●												●		●			
DGF 150/2/G40V A1CM/50			●												●		●			
DGF 200/2/G40V A1CM/50			●												●		●			
DGF 75/2/G40V A1CT/50		●													●		●			
DGF 100/2/G40V A1CT/50		●													●		●			
DGF 150/2/G40V A1CT/50		●													●		●			
DGF 200/2/G40V A1CT/50		●													●		●			
DGF 150/2/G40H A1CM/50			●												●		●			
DGF 200/2/G40H A1CM/50			●												●		●			
DGF 150/2/G40H A1CT/50		●													●		●			
DGF 200/2/G40H A1CT/50		●													●		●			
DGF 150/2/G50V A1CM/50			●												●		●			
DGF 200/2/G50V A1CM/50			●												●		●			
DGF 150/2/G50V A1CT/50		●													●		●			
DGF 200/2/G50V A1CT/50		●													●		●			
DGF 75/2/G50H A1CM/50			●												●		●			
DGF 100/2/G50H A1CM/50			●												●		●			
DGF 150/2/G50H A1CM/50			●												●		●			
DGF 200/2/G50H A1CM/50			●												●		●			
DGF 75/2/G50H A1CT/50		●													●		●			
DGF 100/2/G50H A1CT/50		●													●		●			
DGF 150/2/G50H A1CT/50		●													●		●			
DGF 200/2/G50H A1CT/50		●													●		●			
DGF 150/2/G65V A1CM/50			●												●		●			
DGF 200/2/G65V A1CM/50			●												●		●			
DGF 150/2/G65V A1CT/50		●													●		●			
DGF 200/2/G65V A1CT/50		●													●		●			
DGF 150/2/65 A1CM/50			●												●		●			
DGF 200/2/65 A1CM/50			●												●		●			
DGF 150/2/65 A1CT/50		●													●		●			
DGF 200/2/65 A1CT/50		●													●		●			
DGF 150/2/80 A1CM/50			●												●		●			
DGF 200/2/80 A1CM/50			●												●		●			
DGF 150/2/80 A1CT/50		●													●		●			
DGF 200/2/80 A1CT/50		●													●		●			
DGF 100/4/65 A1CT/50		●													●		●			
DGF 100/4/80 A1CT/50		●													●		●			

NOTE: For single phase pumps thermal protections into the winding have to be connected to the electrical panel.
 Capacitor supplied but not connected to the pump cable.
 The use of an electrical panel as circuit breaker housing is mandatory.
 For installation please see use and maintenance instructions booklet.

DGF

Overall dimensions and weights

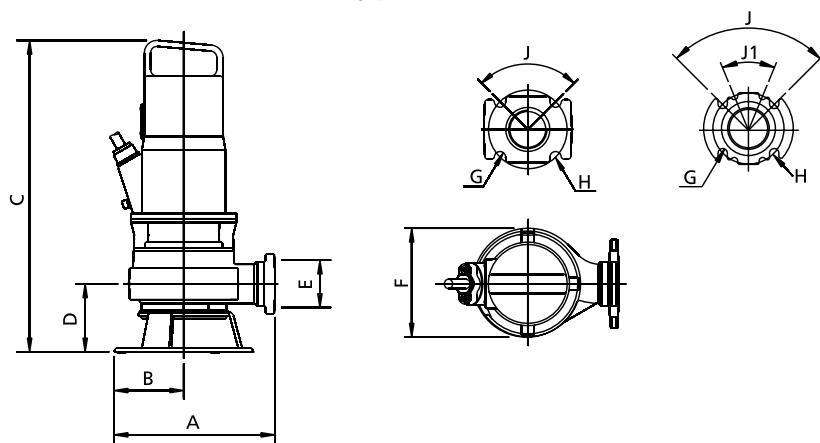
Models with vertical delivery port



	A	B	C	D	E	F	kg
DGF 75/2/G40V A1CM(T)/50	245	80	480	150	G 1 1/2"	170	27
DGF 100/2/G40V A1CM(T)/50	245	80	480	150	G 1 1/2"	170	28
DGF 150/2/G40V A1CM(T)/50	260	100	480	150	G 1 1/2"	205	30
DGF 200/2/G40V A1CM(T)/50	260	100	480	150	G 1 1/2"	205	31
DGF 150/2/G50V A1CM(T)/50	270	100	495	140	G 2"	205	32
DGF 200/2/G50V A1CM(T)/50	270	100	495	140	G 2"	205	33
DGF 150/2/G65V A1CM(T)/50	300	105	475	140	G 2 1/2"	210	31
DGF 200/2/G65V A1CM(T)/50	300	105	475	140	G 2 1/2"	210	33

Measurements in mm

Models with horizontal delivery port

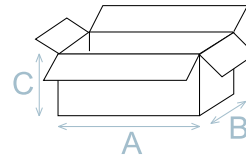


	A	B	C	D	E	F	G	H	J	J1	kg
DGF 150/2/G40H A1CM(T)/50	260	100	480	102	G 1 1/2"-DN40	205	14	90	90°	-	29
DGF 200/2/G40H A1CM(T)/50	260	100	480	102	G 1 1/2"-DN40	205	14	90	90°	-	30
DGF 75/2/G50H A1CM(T)/50	230	90	495	110	G 2"-DN50	175	18	125	90°	-	28
DGF 100/2/G50H A1CM(T)/50	230	90	495	110	G 2"-DN50	175	18	125	90°	-	29
DGF 150/2/G50H A1CM(T)/50	260	100	480	100	G 2"-DN50	205	18	125	90°	-	31
DGF 200/2/G50H A1CM(T)/50	260	100	480	100	G 2"-DN50	205	18	125	90°	-	32
DGF 150/2/65 A1CM(T)/50	290	105	475	70	65	210	18	145	90°	-	32
DGF 200/2/65 A1CM(T)/50	290	105	475	70	65	210	18	145	90°	-	34
DGF 150/2/80 A1CM(T)/50	290	105	495	80	80	210	18	160	90°	45°	33
DGF 200/2/80 A1CM(T)/50	290	105	495	80	80	210	18	160	90°	45°	35
DGF 100/4/65 A1CT/50	320	130	490	80	65	250	18	145	90°	-	38
DGF 100/4/80 A1CT/50	320	130	440	80	80	250	18	160	90°	45°	41

Measurements in mm

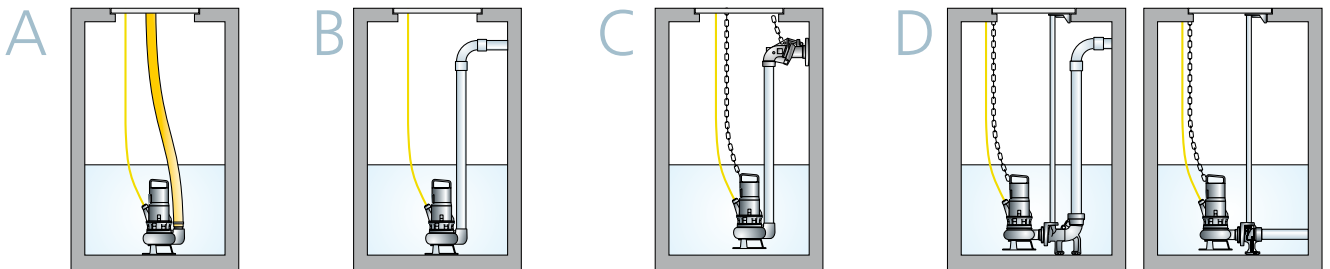
Packaging dimension

	A	B	C
DGF 75/2/G40V A1CM(T)/50	580	310	310
DGF 100/2/G40V A1CM(T)/50	580	310	310
DGF 150/2/G40V A1CM(T)/50	580	310	310
DGF 200/2/G40V A1CM(T)/50	580	310	310
DGF 150/2/G40H A1CM(T)/50	580	310	310
DGF 200/2/G40H A1CM(T)/50	580	310	310
DGF 150/2/G50V A1CM(T)/50	580	310	310
DGF 200/2/G50V A1CM(T)/50	580	310	310
DGF 75/2/G50H A1CM(T)/50	580	310	310
DGF 100/2/G50H A1CM(T)/50	580	310	310
DGF 150/2/G50H A1CM(T)/50	580	310	310
DGF 200/2/G50H A1CM(T)/50	580	310	310
DGF 150/2/G65V A1CM(T)/50	580	310	310
DGF 200/2/G65V A1CM(T)/50	580	310	310
DGF 150/2/65 A1CM(T)/50	725	445	415
DGF 200/2/65 A1CM(T)/50	725	445	415
DGF 150/2/80 A1CM(T)/50	725	445	415
DGF 200/2/80 A1CM(T)/50	725	445	415
DGF 100/4/65 A1CT/50	725	445	415
DGF 100/4/80 A1CT/50	725	445	415



Dimension in mm

Installations available



Dry installation available for specified models. Contact Customer Service for more information.