DGF

Set-back vortex impeller

All product images are indicative only

General characteristics

Set-back vortex impeller	
motor power	0,55 ÷ 1,5 kW
poles	2 / 4
discharge	GAS 1½" ÷ 2½" vertical DN65-DN80 horizontal
free passage	max 80 mm
max flow rate	16.7 l/s
max head	17.5 m

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. Series with explosion-proof ATEX certification.

Applications

Specifically developed for use where there are traces of flammable liquids or in potentially explosive atmospheres, the DGF 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
Paint type	Ecological bicomponent epoxy (medium thickness 150 µm)
Set of standard mechanical seals	Two silicon carbide mechanical seals (2SiC)

Operating limits

Maximum operating temperature	40 °C
PH of treated fluid	6 ÷ 14
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	30

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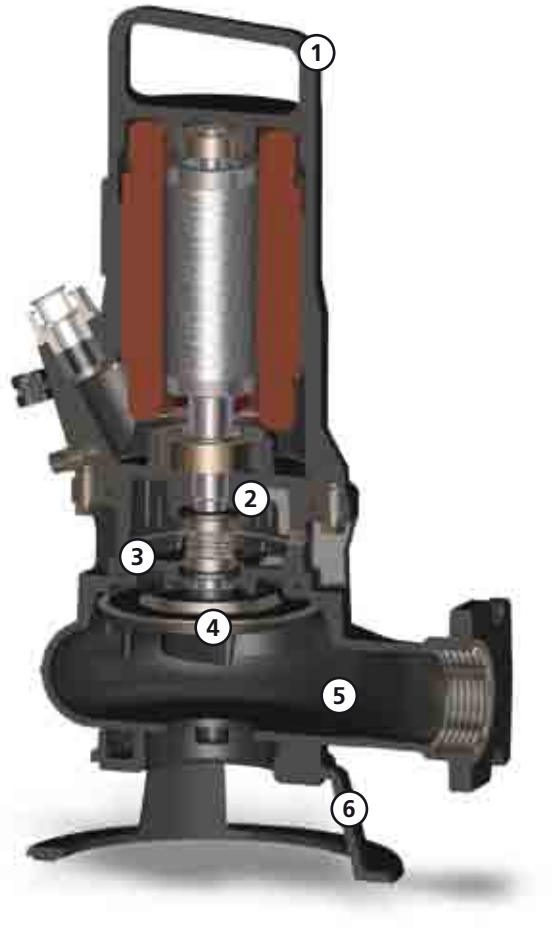

CE 0496 Ex II 2GD Ex db k c IIB T4 Ex tb IIIC T135°C IP68
Models with ATEX certification, suitable for installation in the presence of potentially explosive gases, powders and liquids

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 silicon carbide (2SiC) mechanical seals in oil sump.

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

Wide free passage allowing the expulsion of solids and preventing fouling of the impeller.

Discharge - support foot

Threaded, flanged discharge for the maximum ease of installation.
Cast iron support foot.

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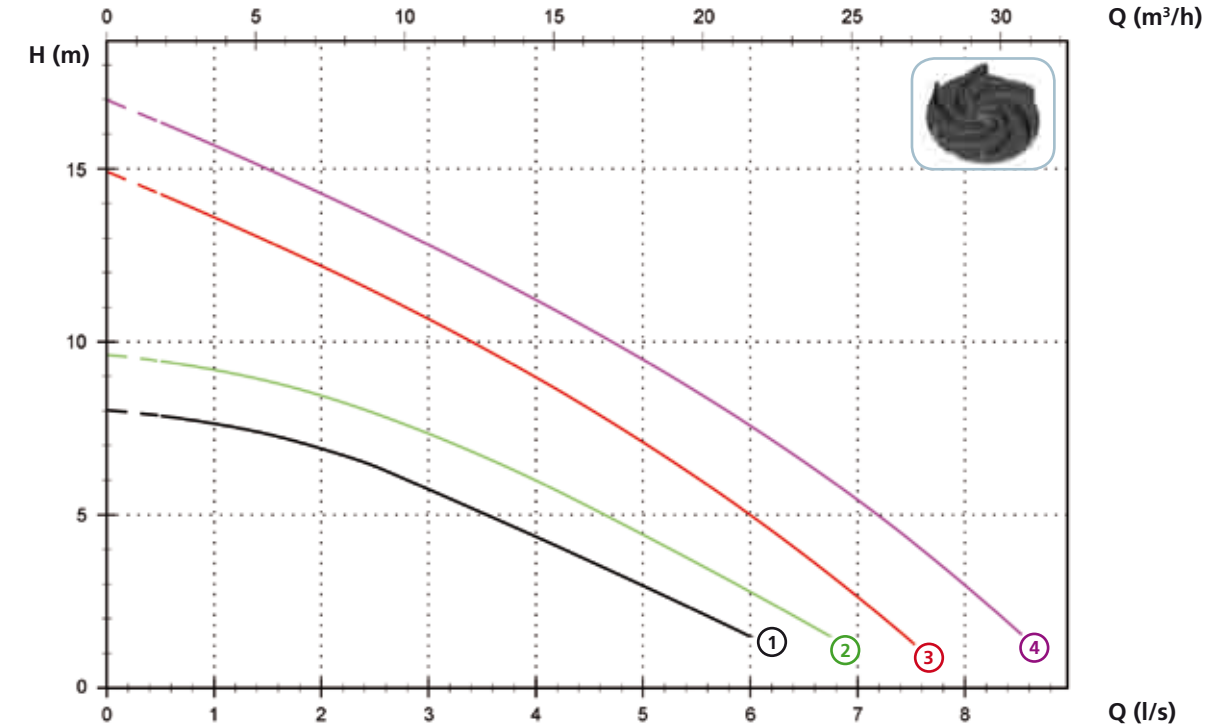
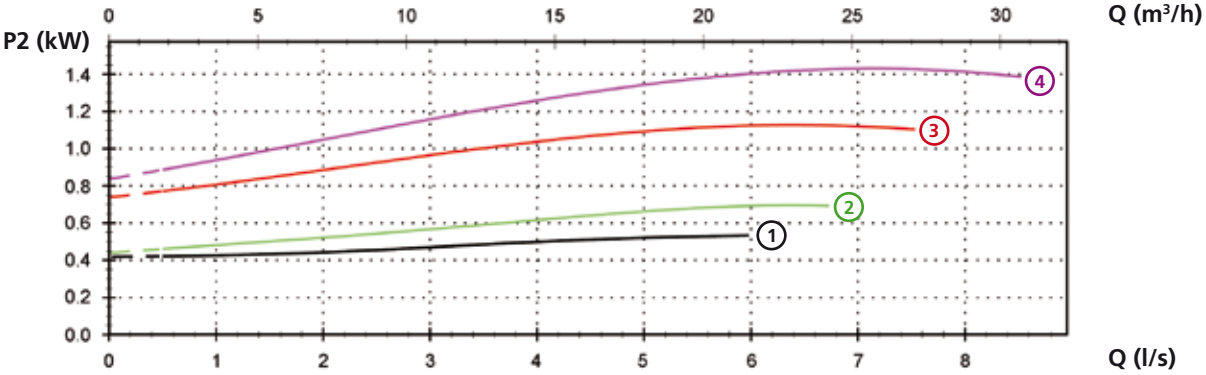
Models with vertical GAS 1½" threaded discharge - 2 poles

Performances





Technical data

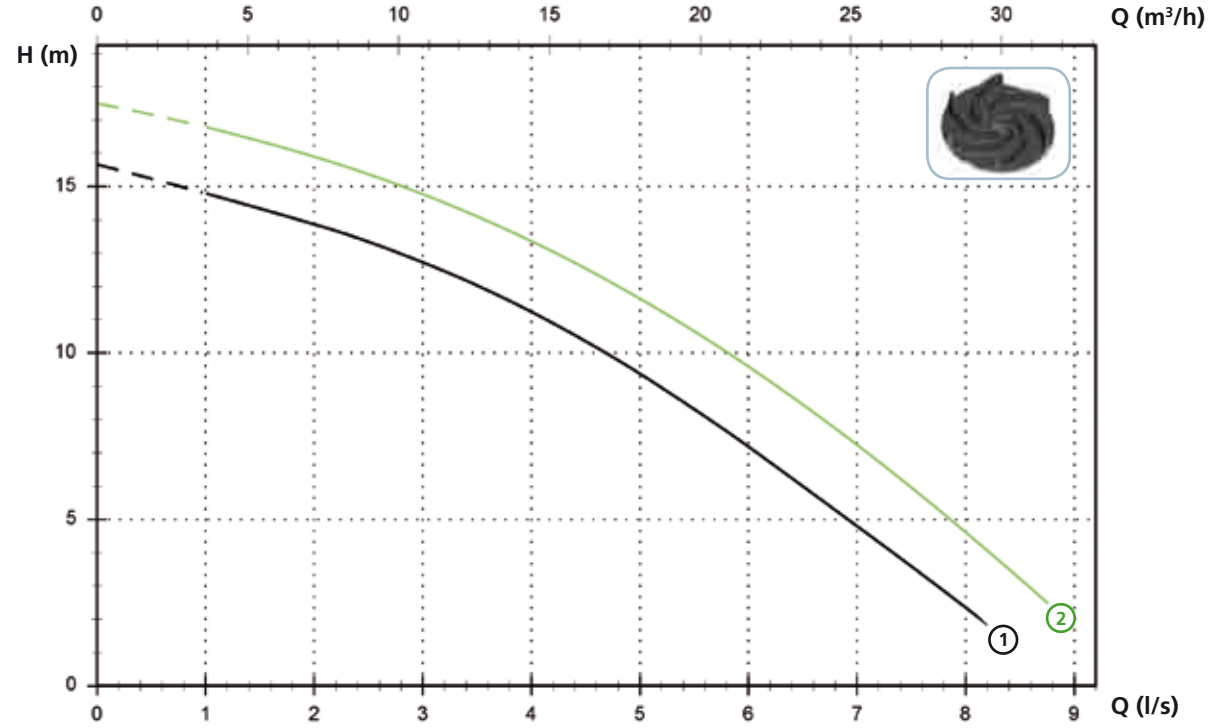
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 75/2/G40V A1CM/50	230	1	0.9	0.55	3.9	2900	Dir	G 1½"	40 mm
2	DGF 100/2/G40V A1CM/50	230	1	1.1	0.74	4.9	2900	Dir	G 1½"	40 mm
3	DGF 150/2/G40V A2CM/50	230	1	1.6	1.1	7.2	2900	Dir	G 1½"	40 mm
4	DGF 200/2/G40V A2CM/50	230	1	2.2	1.5	9.8	2900	Dir	G 1½"	40 mm

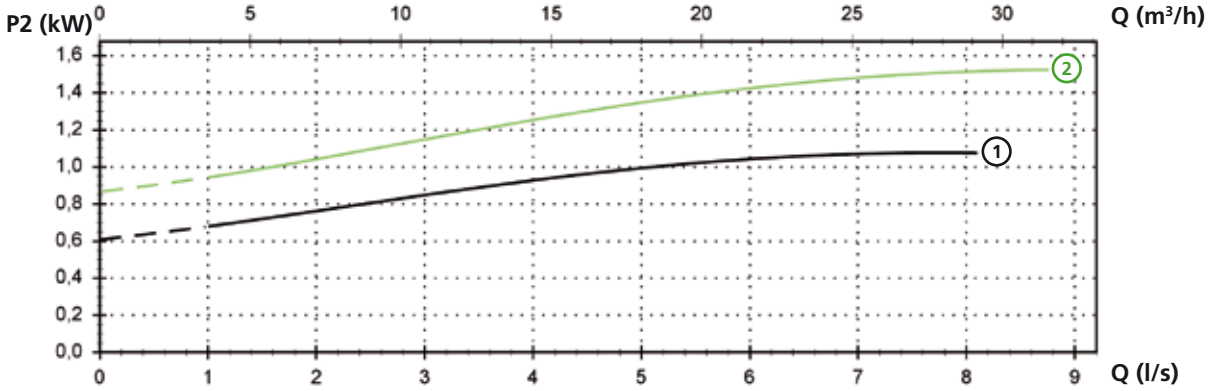
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 75/2/G40V A1CT/50	400	3	0.8	0.55	1.5	2900	Dir	G 1½"	40 mm
2	DGF 100/2/G40V A1CT/50	400	3	1.1	0.74	1.9	2900	Dir	G 1½"	40 mm
3	DGF 150/2/G40V A2CT/50	400	3	1.7	1.1	2.9	2900	Dir	G 1½"	40 mm
4	DGF 200/2/G40V A2CT/50	400	3	2.1	1.5	3.7	2900	Dir	G 1½"	40 mm

DGF

Models with horizontal GAS 1½" threaded - DN32 PN6 flanged discharge - 2 poles

Performances





Technical data

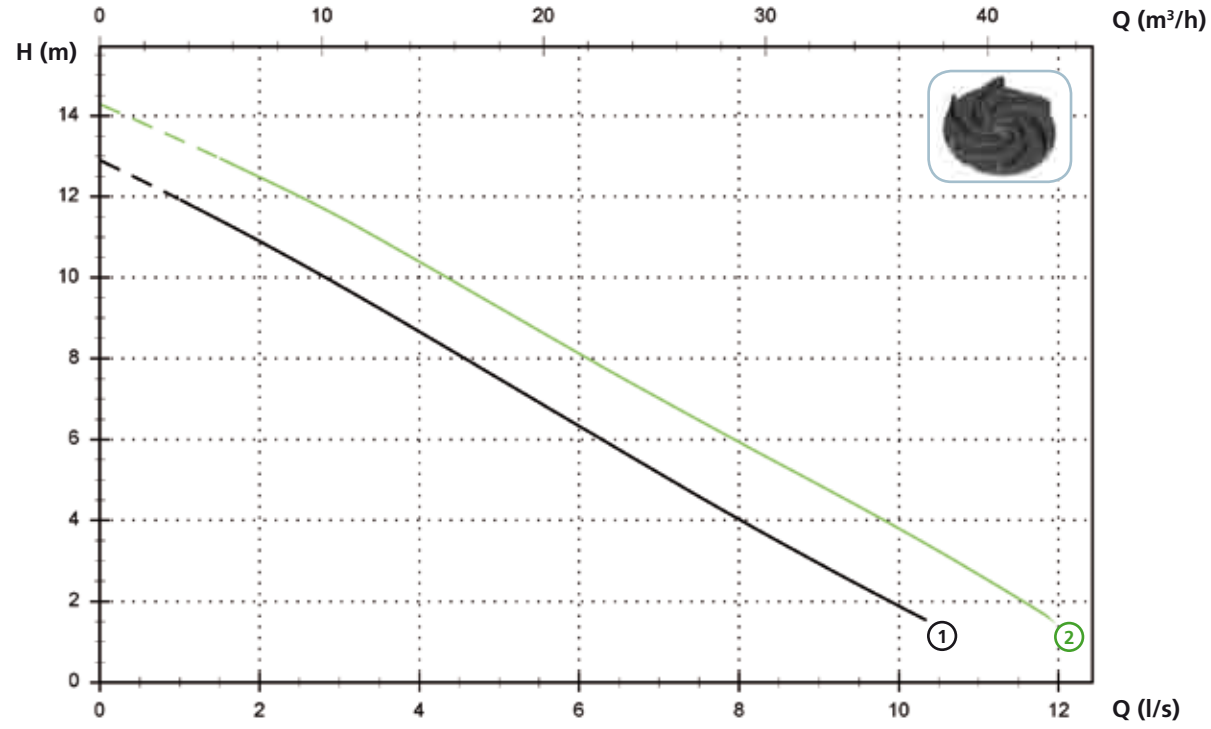
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/G40H A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	G 1½" - DN32 PN6	40 mm
2	DGF 200/2/G40H A1CM/50	230	1	2.2	1.5	9.8	2900	Dir	G 1½" - DN32 PN6	40 mm

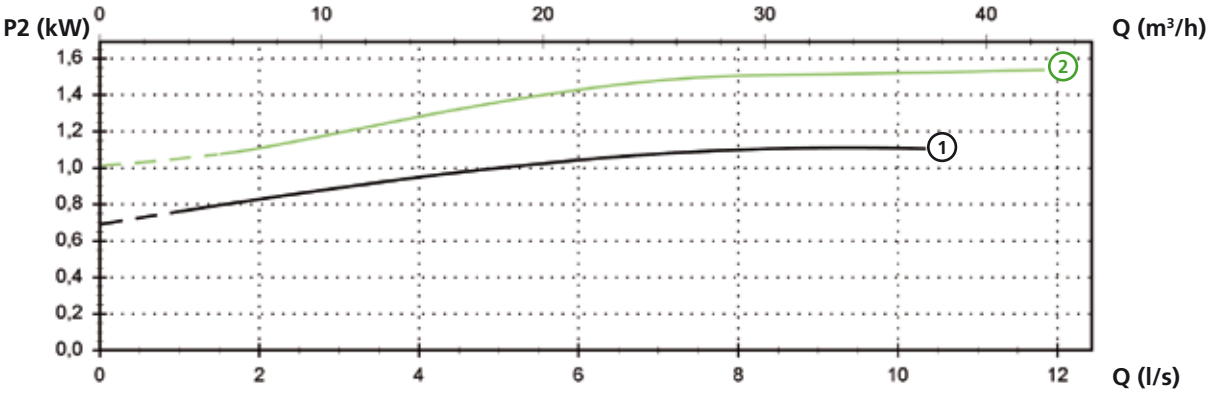
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/G40H A1CT/50	400	3	1.7	1.1	2.9	2900	Dir	G 1½" DN32 PN6	40 mm
2	DGF 200/2/G40H A1CT/50	400	3	2.1	1.5	3.7	2900	Dir	G 1½" DN32 PN6	40 mm

DGF

Models with vertical GAS 2" threaded discharge - 2 poles

Performances





Technical data

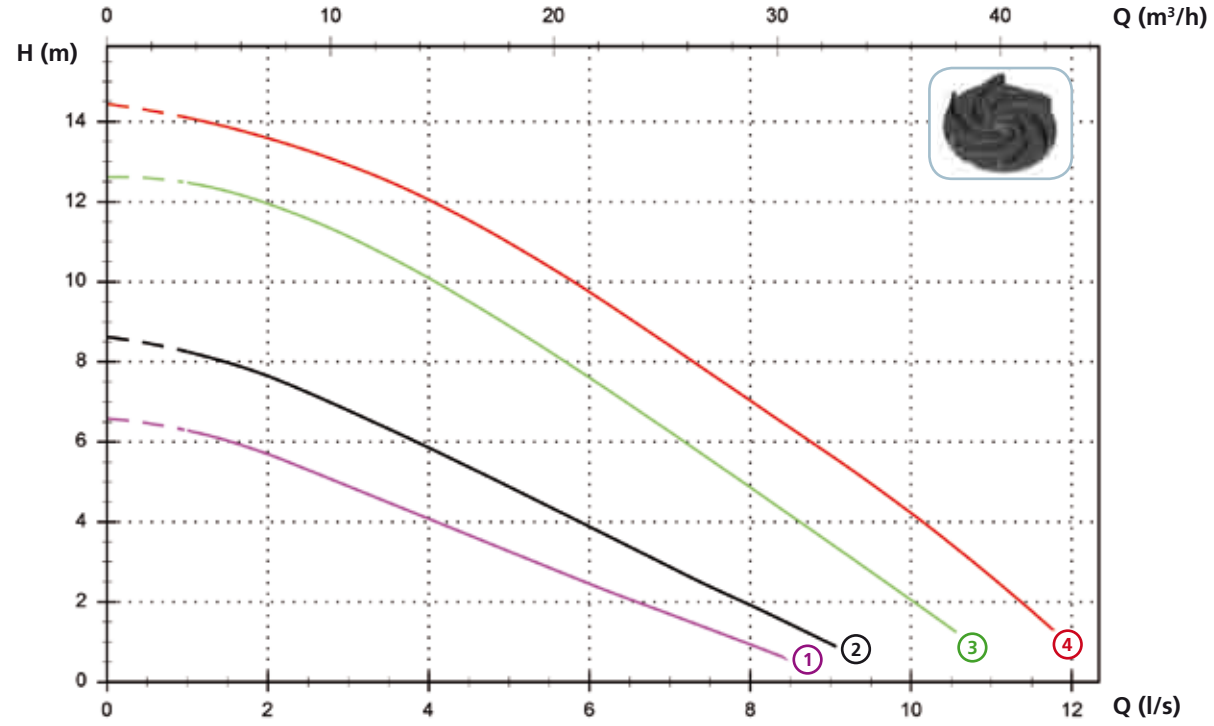
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
(1) DGF 150/2/G50V A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	G 2"	50 mm
(2) DGF 200/2/G50V A1CM/50	230	1	2.2	1.5	9.8	2900	Dir	G 2"	50 mm

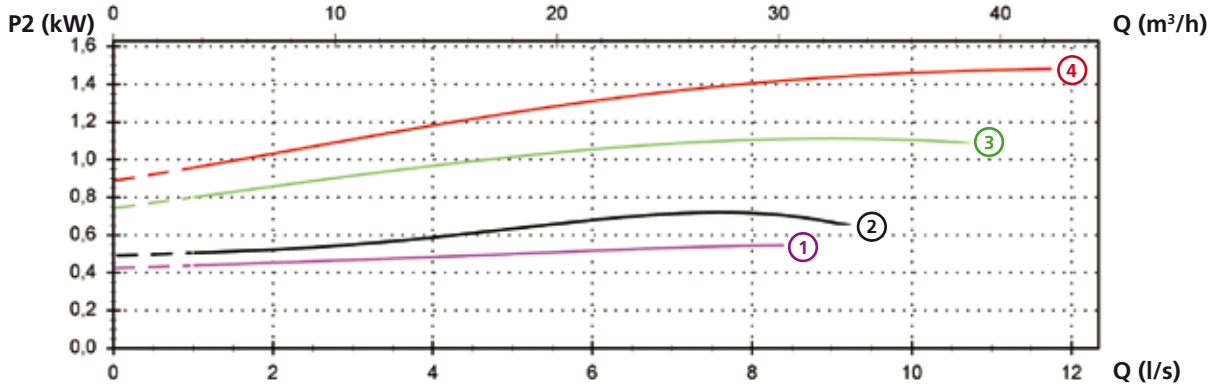
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
(1) DGF 150/2/G50V A1CT/50	400	3	1.7	1.1	2.9	2900	Dir	G 2"	50 mm
(2) DGF 200/2/G50V A1CT/50	400	3	2.1	1.5	3.7	2900	Dir	G 2"	50 mm

DGF

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

Performances





Technical data

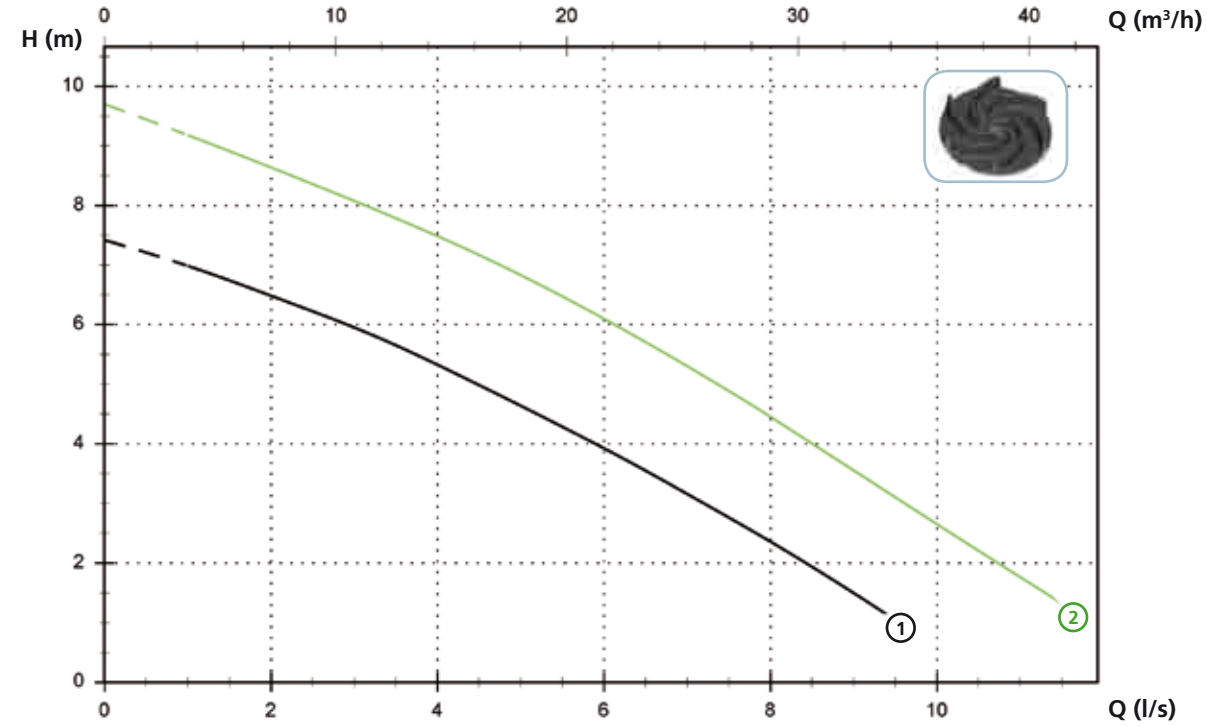
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
(1) DGF 75/2/G50H A1CM/50	230	1	0.8	0.55	3.9	2900	Dir	G 2" - DN50 PN10-16	50 mm
(2) DGF 100/2/G50H A1CM/50	230	1	1.1	0.74	4.9	2900	Dir	G 2" - DN50 PN10-16	50 mm
(3) DGF 150/2/G50H A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	G 2" - DN50 PN10-16	50 mm
(4) DGF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

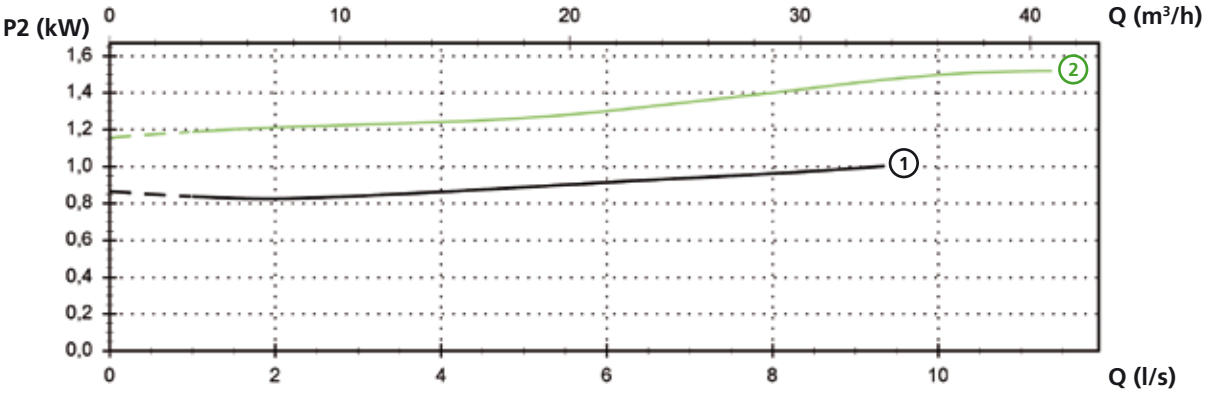
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
(1) DGF 75/2/G50H A1CT/50	400	3	0.8	0.55	1.5	2900	Dir	G 2" - DN50 PN10-16	50 mm
(2) DGF 100/2/G50H A1CT/50	400	3	1.1	0.74	1.9	2900	Dir	G 2" - DN50 PN10-16	50 mm
(3) DGF 150/2/G50H A1CT/50	400	3	1.7	1.1	2.9	2900	Dir	G 2" - DN50 PN10-16	50 mm
(4) DGF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

DGF

Models with vertical GAS 2½" threaded discharge - 2 poles

Performances





Technical data

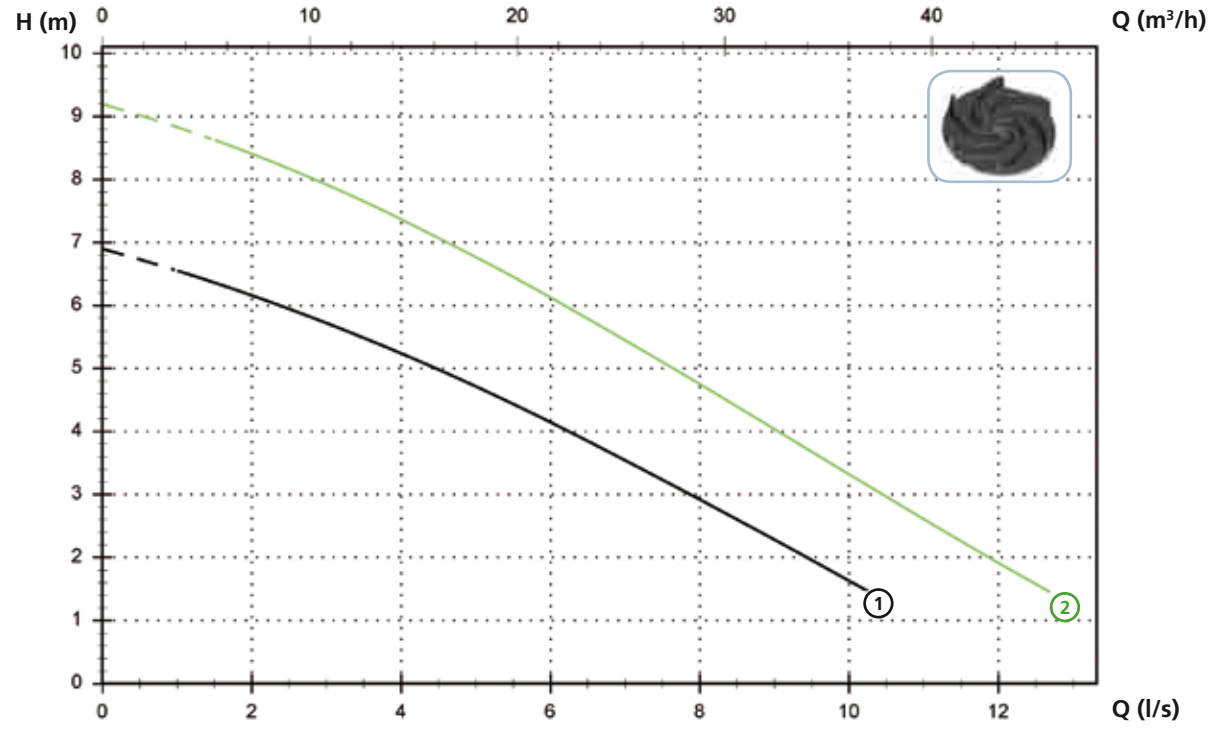
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/G65V A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	G 2½"	65 mm
2	DGF 200/2/G65V A1CM/50	230	1	2.2	1.5	9.8	2900	Dir	G 2½"	65 mm

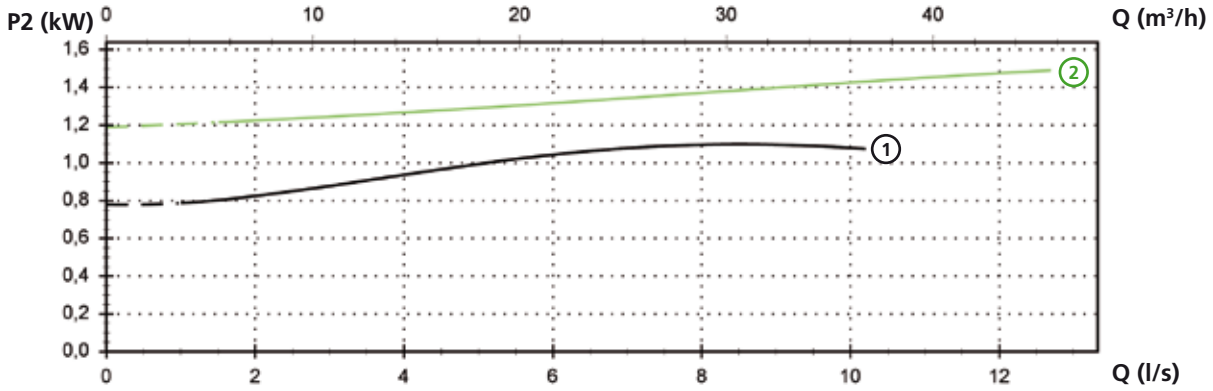
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/G65V A1CT/50	400	3	1.7	1.1	2.9	2900	Dir	G 2½"	65 mm
2	DGF 200/2/G65V A1CT/50	400	3	2.1	1.5	3.7	2900	Dir	G 2½"	65 mm

DGF

Models with horizontal DN65 PN10-16 flanged discharge - 2 poles

Performances





Technical data

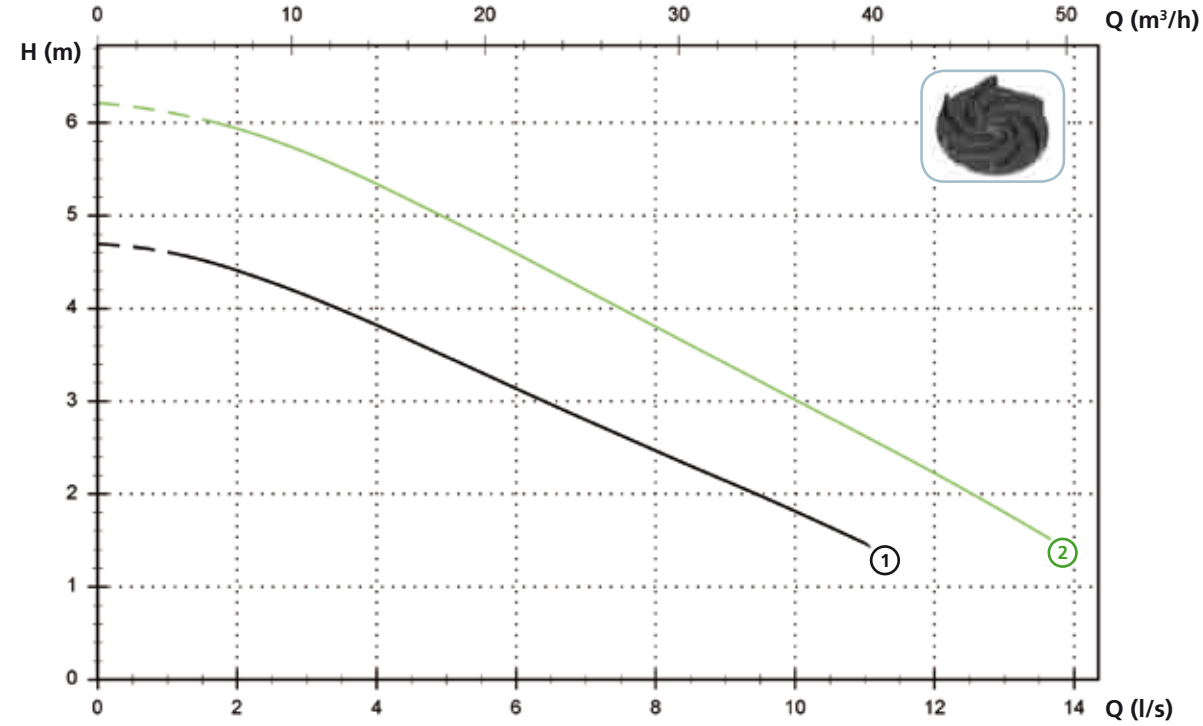
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/65 A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	DN65 PN10-16	65 mm
2	DGF 200/2/65 A1CM/50	230	1	2.2	1.5	9.8	2900	Dir	DN65 PN10-16	65 mm

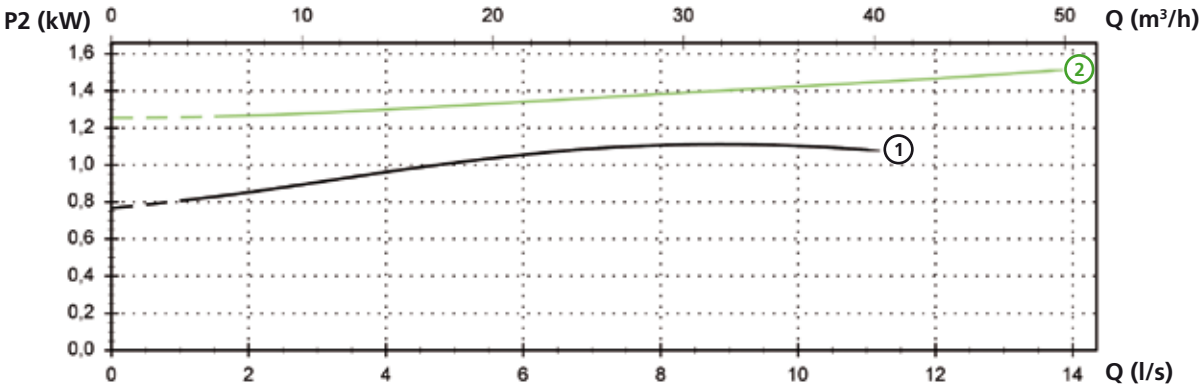
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/65 A1CT/50	400	3	1.7	1.1	2.9	2900	Dir	DN65 PN10-16	65 mm
2	DGF 200/2/65 A1CT/50	400	3	2.1	1.5	3.7	2900	Dir	DN65 PN10-16	65 mm

DGF

Models with horizontal DN80 PN10-16 flanged discharge - 2 poles

Performances





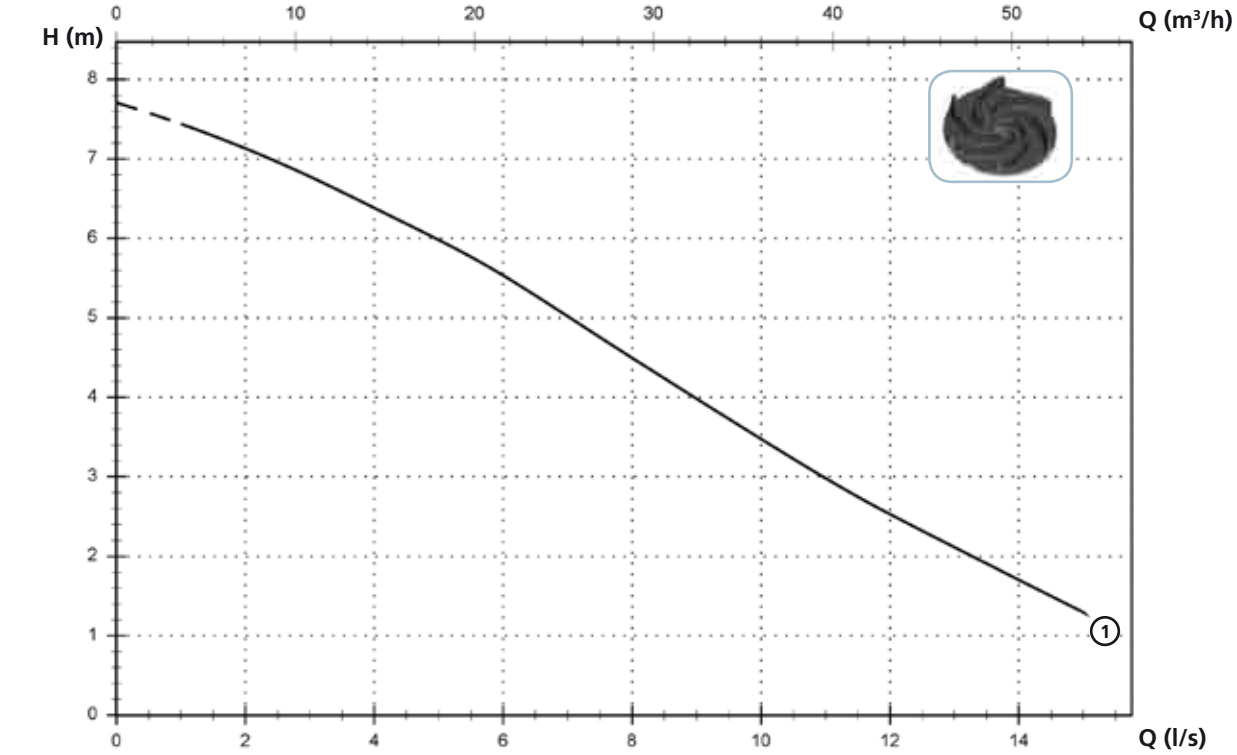
Technical data

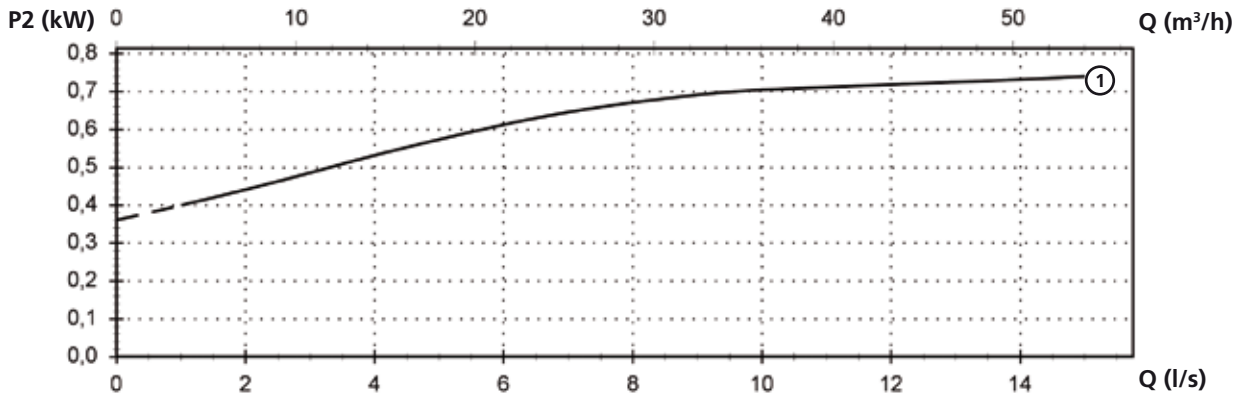
		V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
1	DGF 150/2/80 A1CM/50	230	1	1.6	1.1	7.2	2900	Dir	DN80 PN10-16	80 mm
2	DGF 200/2/80 A1CM/50	230	1	2.2	1.5	9.8	2900	Dir	DN80 PN10-16	80 mm

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

Models with horizontal DN65 PN10-16 flanged discharge - 4 poles

Performances





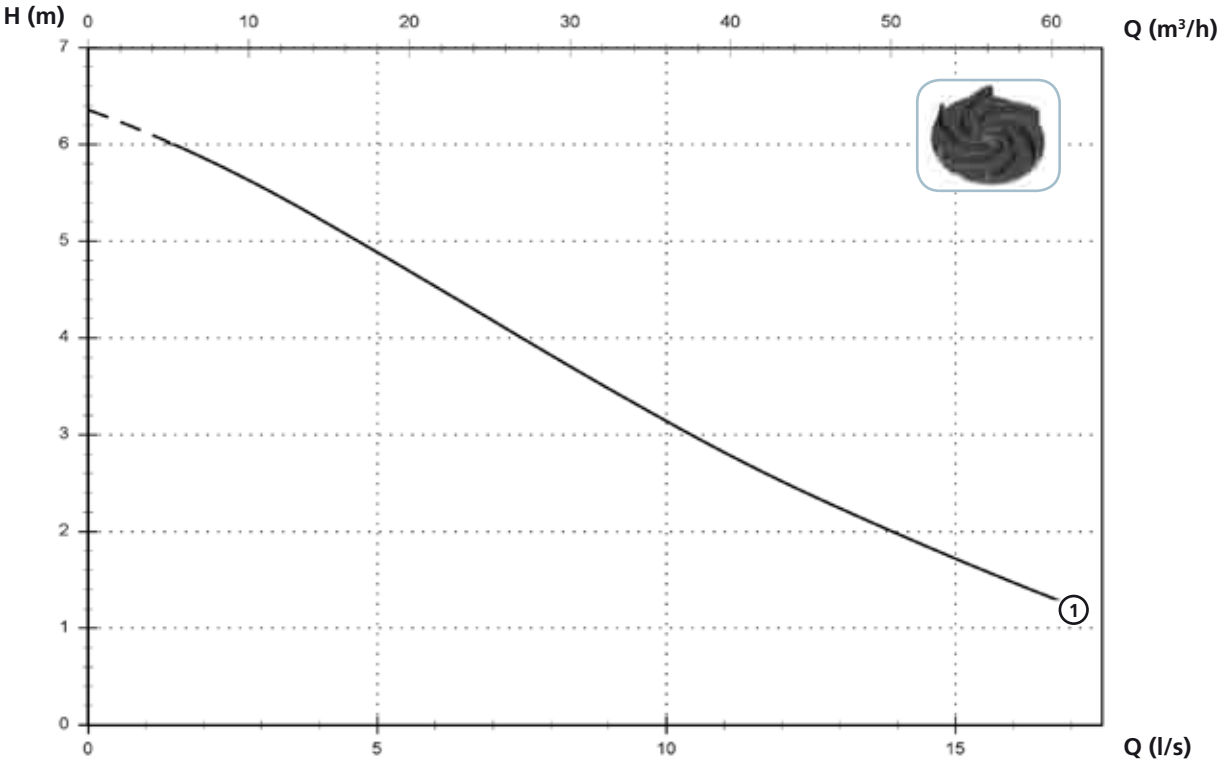
Technical data

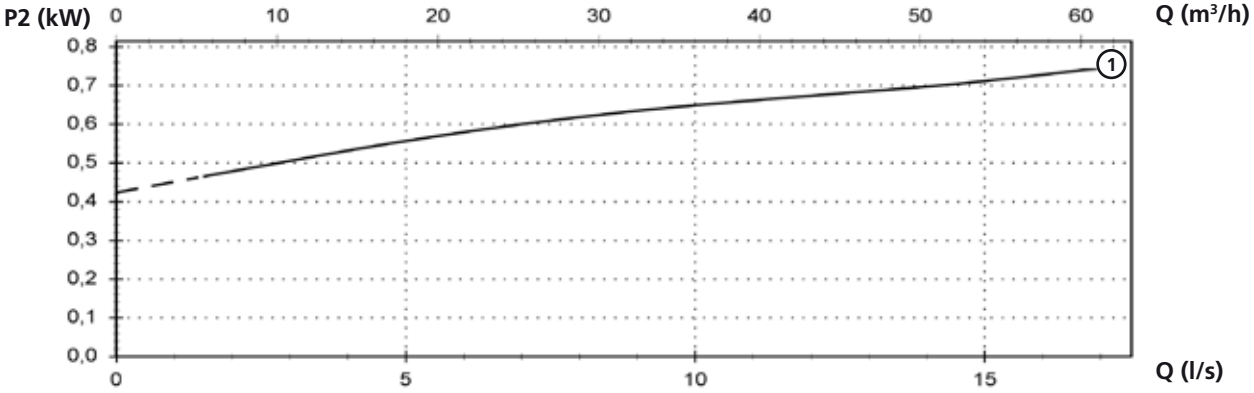
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
(1) DGF 100/4/65 A1CT/50	400	3	1.1	0.74	2.2	1450	Dir	DN65 PN10-16	50 mm

DGF

Models with horizontal DN80 PN10-16 flanged discharge - 4 poles

Performances





Technical data

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

DGF

Versions available

(Key to versions on page 16)

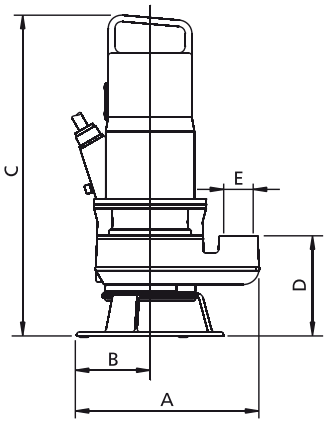
	Electrical variants												Cooling				Mechanical seals			
	NAE	T	TC	TCD	TCDT	TCDGT	TCG	TCST	TCSGT	TS	TR	TRG	N	CC CCE	FT	CGFT	2SIC	SICM	SICAL	2SICAL
DGF 75/2/G40V A1CM/50			●										●				●			
DGF 100/2/G40V A1CM/50			●										●				●			
DGF 150/2/G40V A2CM/50			●										●				●			
DGF 200/2/G40V A2CM/50			●										●				●			
DGF 75/2/G40V A1CT/50		●											●				●			
DGF 100/2/G40V A1CT/50		●											●				●			
DGF 150/2/G40V A2CT/50		●											●				●			
DGF 200/2/G40V A2CT/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.

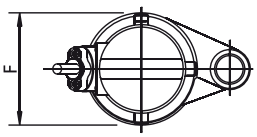
DGF

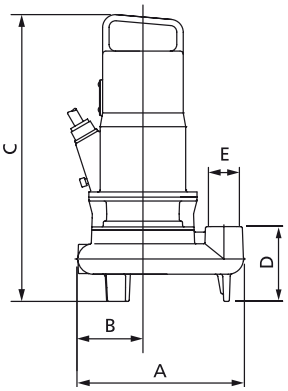
Overall dimensions and weights

Models with vertical discharge - 2 poles

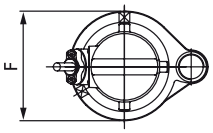


A1CM(T)/50





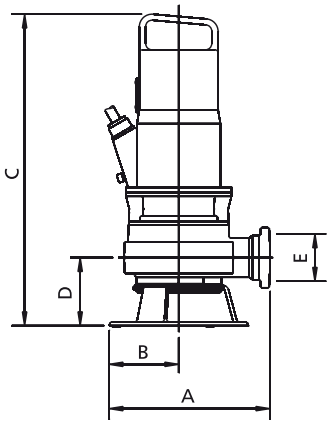
A2CM(T)/50

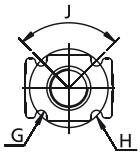


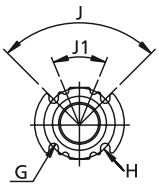
	A	B	C	D	E	F	kg
DGF 75/2/G40V A1CM(T)/50	245	80	480	150	G 1½"	170	27
DGF 100/2/G40V A1CM(T)/50	245	80	480	150	G 1½"	170	28
DGF 150/2/G40V A2CM(T)/50	260	102	445	115	G 1½"	205	30
DGF 200/2/G40V A2CM(T)/50	260	102	445	115	G 1½"	205	31
DGF 150/2/G50V A1CM(T)/50	270	100	495	140	G 2"	205	32
DGF 200/2/G50V A1CM(T)/50	270	100	495	140	G 2"	205	33
DGF 150/2/G65V A1CM(T)/50	300	105	475	140	G 2½"	210	31
DGF 200/2/G65V A1CM(T)/50	300	105	475	140	G 2½"	210	33

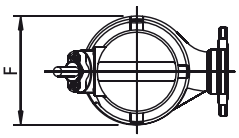
Dimensions in mm *All weights and dimensions are indicative only*

Models with horizontal discharge - 2 poles







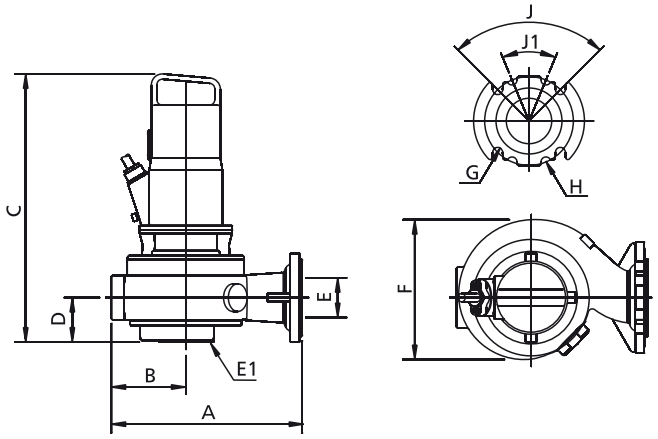


	A	B	C	D	E	F	G	H	J	J1	kg
DGF 150/2/G40H A1CM(T)/50	260	100	480	102	G 1½" - DN40	205	14	90	90°	-	29
DGF 200/2/G40H A1CM(T)/50	260	100	480	102	G 1½" - DN40	205	14	90	90°	-	30
DGF 75/2/G50H A1CM(T)/50	230	90	495	110	G 2" - DN50	175	18	125	90°	-	28
DGF 100/2/G50H A1CM(T)/50	230	90	495	110	G 2" - DN50	175	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

Dimensions in mm *All weights and dimensions are indicative only*

DGF

Models with horizontal discharge - 4 poles

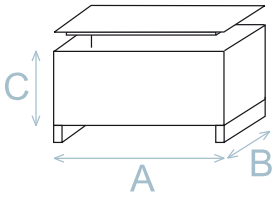


	A	B	C	D	E	E1(*)	F	G	H	J	J1	kg
DGF 100/4/65 A1CT/50	320	130	490	80	65	65	250	18	145	90°	-	38
DGF 100/4/80 A1CT/50	320	130	440	80	80	80	250	18	160	90°	45°	41

Dimensions in mm *All weights and dimensions are indicative only*

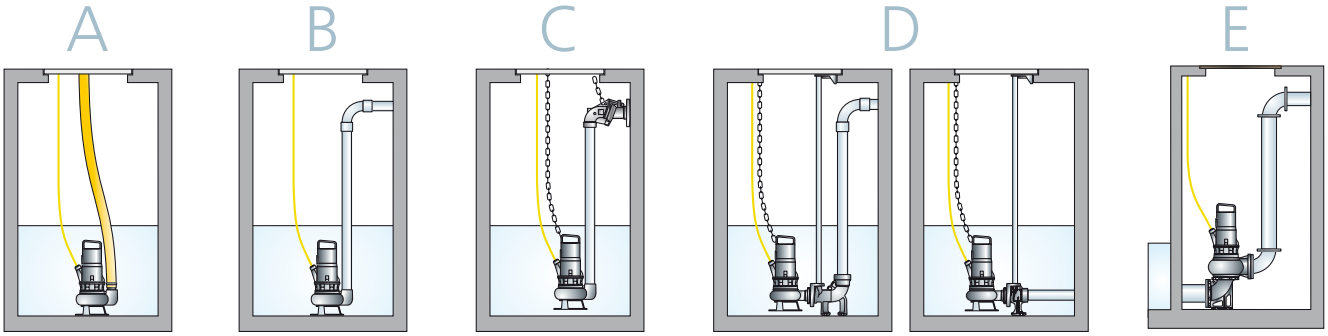
Packaging dimension

	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 A2CM(T)/50	580	310	310
DGF 200/2/G40V A2CM(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 *All weights and dimensions are indicative only*

Installations available



Dry installation available in S3 mode for models with suction flange.
Contact Customer Service for more information.