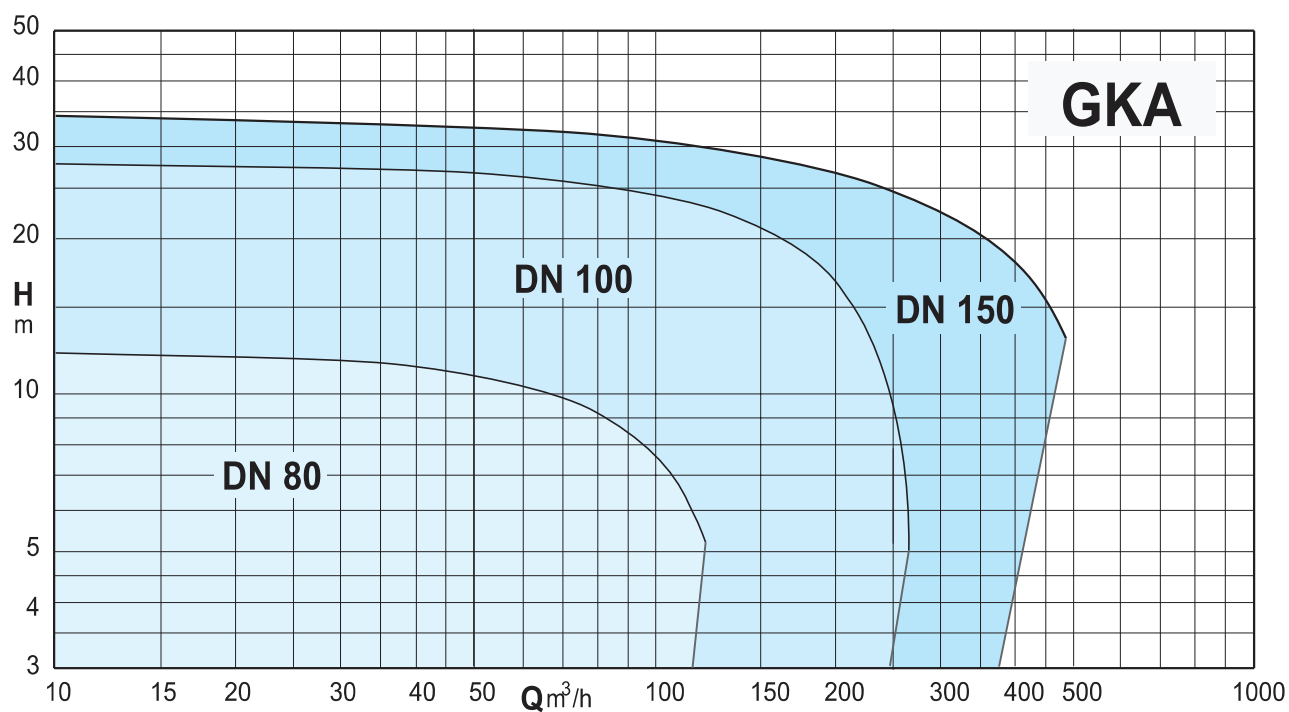
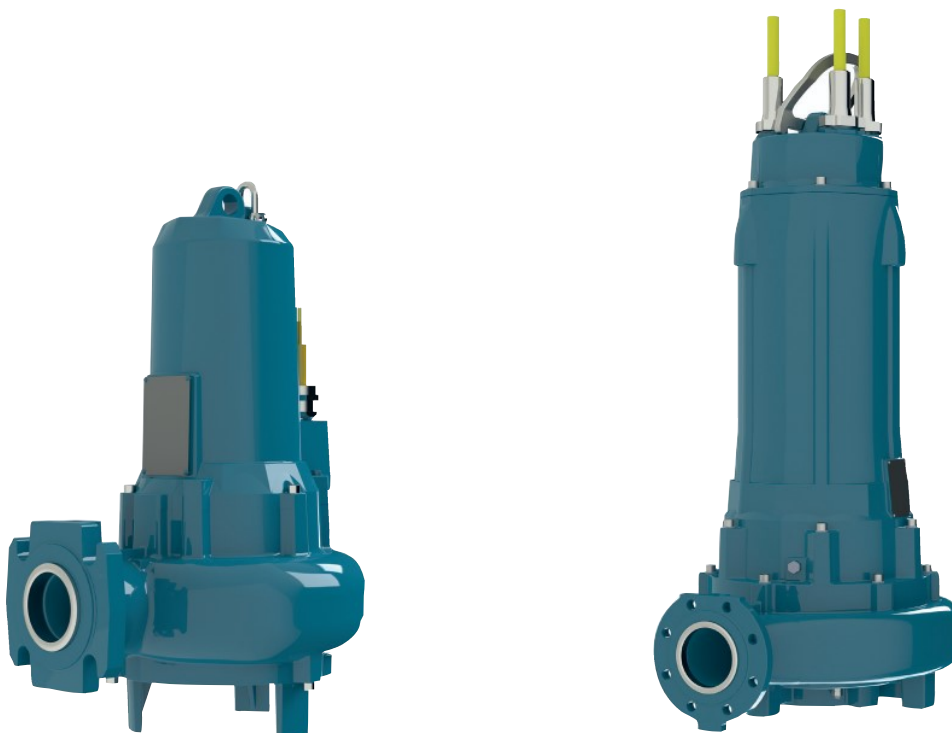




Submersible pumps with open twin blade impeller



Construction

Submersible pumps with open twin blade impeller

It offers reliability against clogging and features a good resistance to wear, low mechanical action on the fluid, high hydraulic efficiency.

Low vibrations thanks to the dynamically balanced impeller.

Delivery port DN 80-100-150.

Applications

Particularly suitable for clean water, water containing solid and fibrous solids, cloacal water, sewage and sludge.

Particularly suitable for the emptying of sewage from cesspits or primary collection tanks or industrial waste water.

Solid passage from 34 to 60 mm

Operating conditions

Liquid temperature: from 0°C to +40°C.

Maximum immersion depth: 20m (with cable of suitable length).

Maximum working pressure: 80 m.w.c.

pH of the liquid to be lifted: 4 ÷ 10

Continuous service (with water at minimum immersion level).

Materials

Pump casing: cast iron EN-GJL250 UNI-EN 1561-11

Impeller: cast iron EN-GJL250 UNI-EN 1561-11

Motor casing: cast iron EN-GJL250 UNI-EN 1561-11 / EN-GJL450 UNI-EN 1561-11

Shaft: stainless steel X20Cr13 (AISI420)

Pump mechanical seal with flange size H - L - N

- motor side: graphite/ceramic

- pump side: silicon/ceramic carbide

Motor

4 poles induction, 50Hz

Three-phase version: 400V ± 10%, up to 4.8kW
400/690V ± 10% from 5.8kW

Isolation class: H

Degree of protection: IP 68

Max number of starts per hour:

- 20 up to 5 kW

- 15 up to 10 kW

- 10 for higher powers

Cable: length 10m

Direction of rotation: clockwise top view

Motor suitable for operation with frequency converter.

Special features on request

(Check feasibility according to the model with our Technical Sales Office).

ATEX versions complying with EN60079-0 - EN60079-1 type I M2 Ex db h I Mb, II 2G Ex db h IIB T4 Gb.

Impeller in stainless steel AISI 316 or bronze.

Bronze impeller seat ring.

Cable length up to 40 m

Other mechanical seal.

Higher or lower liquid or ambient temperatures.

Ceramic coating.

Internal anti-erosion coating, external anti-corrosion.

Designation

GKA4 100-38A-0125L-X

GK = Series

A = open twin blade impeller

4 = Number of poles

100 = Delivery port diameter in mm

38 = Free passage in mm

A = Impeller trim

0125 = Motor size (P2 = 12,5 kW)

L = Size of electric motor flanging

X = Versione ATEX

Technical data

TYPE	Version	Dry chamber version		Probes		Cable	Class	Duck foot coupling	Submersible pump rest	Dry chamber pump rest	Dry chamber pump support
	ATEX	Vertical	Horizontal	thermal	conductivity	NSSHOU-J	Isolation				
GKA4 80-34L-0016H	o	#	#	•	•	•	H / IE3	SAK 80-80-2	APK 80	APCK 80	SOK80/N3
GKA4 80-34G-0016H	o	#	#	•	•	•	H / IE3	SAK 80-80-2	APK 80	APCK 80	SOK80/N3
GKA4 80-34D-0021H	o	#	#	•	•	•	H / IE3	SAK 80-80-2	APK 80	APCK 80	SOK80/N3
GKA4 80-34A-0029H	o	#	#	•	•	•	H / IE3	SAK 80-80-2	APK 80	APCK 80	SOK80/N3
GKA4 100-38L-0075L	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-38G-0105L	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-38D-0125L	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-38A-0125L	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-41L-0029H	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-41G-0037H	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-41D-0046H	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-41A-0058H	o	#	#	•	•	•	H / IE3	SAK 100-100-2A	APK 100	APCK 100	SOK100/N3
GKA4 100-45L-0165N	o	#	-	•	•	•	H / IE3	SAK 100-100-2	APK 150	APCK 150A	-
GKA4 100-45G-0193N	o	#	-	•	•	•	H / IE3	SAK 100-100-2	APK 150	APCK 150A	-
GKA4 100-45D-0210N	o	#	-	•	•	•	H / IE3	SAK 100-100-2	APK 150	APCK 150A	-
GKA4 100-45A-0260N	o	#	-	•	•	•	H / IE3	SAK 100-100-2	APK 150	APCK 150A	-
GKA4 150-51P-0021H	o	#	#	•	•	•	H / IE3	SAK 150-150-2	APK 150	APCK 150A	SOK150/N3
GKA4 150-51L-0029H	o	#	#	•	•	•	H / IE3	SAK 150-150-2	APK 150	APCK 150A	SOK150/N3
GKA4 150-51G-0037H	o	#	#	•	•	•	H / IE3	SAK 150-150-2	APK 150	APCK 150A	SOK150/N3
GKA4 150-51D-0046H	o	#	#	•	•	•	H / IE3	SAK 150-150-2	APK 150	APCK 150A	SOK150/N3
GKA4 150-51A-0058H	o	#	#	•	•	•	H / IE3	SAK 150-150-2	APK 150	APCK 150A	SOK150/N3
GKA4 150-60L-0165N	o	#	-	•	•	•	H / IE3	SAK 150-200-3	APK 150	APCK 150A	-
GKA4 150-60G-0193N	o	#	-	•	•	•	H / IE3	SAK 150-200-3	APK 150	APCK 150A	-
GKA4 150-60D-0210N	o	#	-	•	•	•	H / IE3	SAK 150-200-3	APK 150	APCK 150A	-
GKA4 150-60A-0260N	o	#	-	•	•	•	H / IE3	SAK 150-200-3	APK 150	APCK 150A	-

• = Standard
- = Not present

o = Optional

= Version with oil chamber
\$ = Version with cooling jacket

= In case of operation in a dry chamber or with a low level of the pumped liquid, it is necessary to introduce the cooling oil according to the quantities indicated in the use and maintenance manual

Performance

n ≈ 1450 1/min

			Q = Flow														
			m³/h	0	21,5	25,2	28,8	32,4	36	45	54	63	72	81	90	99	108
Model	400V	P2	l/min		358	420	480	540	600	750	900	1050	1200	1350	1500	1650	1800
	A	kW	H (m) = Total head														
GKA4 80-34L-0016H	3,4	1.6		10	8,2	7,8	7,5	7,2	6,9	6,2	5,5	4,8	3,9	-	-	-	-
GKA4 80-34G-0016H	3,4	1.6		11,8	9,9	9,6	9,3	9	8,7	8	7,3	6,6	5,8	5	4,2	-	-
GKA4 80-34D-0021H	5	2.1		13	-	-	10,5	10,2	9,9	9,1	8,3	7,6	6,9	6,1	5,3	4,4	-
GKA4 80-34A-0029H	6,1	2.9		15	-	-	-	-	11,8	11,2	10,5	9,8	9	8,3	7,4	6,5	5,6

				Q = Flow														
				m³/h	0	14,4	18	36	54	72	90	108	126	144	162	180	216	252
Model	400V	690V	P2	l/min			240	300	600	900	1200	1500	1800	2100	2400	2700	3000	3600
	A		kW	H (m) = Total head														
GKA4 100-38L-0075L	15,3	8,8	7,5		21,7	20,9	20,7	19,7	18,7	17,5	16,3	15	13,6	12,1	10,5	8,6	-	-
GKA4100-38G-0105L	20	11,5	10,5		25	23,9	23,6	22,4	21,3	20,2	19,1	17,9	16,6	15,3	13,7	11,9	7,8	-
GKA4 100-38D-0125L	24	13,9	12,5		28,4	27,3	27	25,6	24,3	23,1	21,9	20,7	19,5	18,1	16,6	14,9	11	6,4
GKA4 100-38A-0125L	24	13,9	12,5		30,9	29,6	29,3	27,9	26,7	25,4	24,2	22,9	21,6	20,2	18,9	17,4	13,9	-

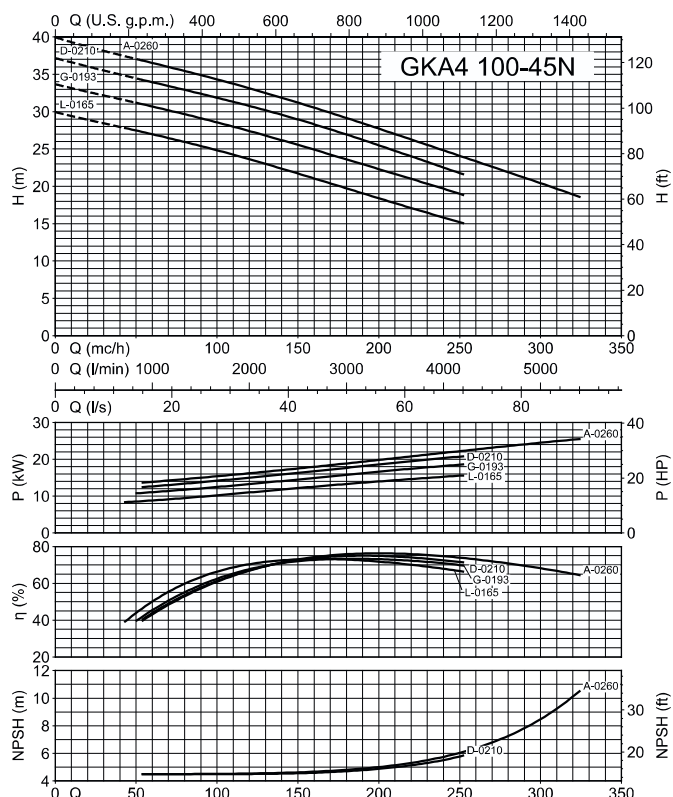
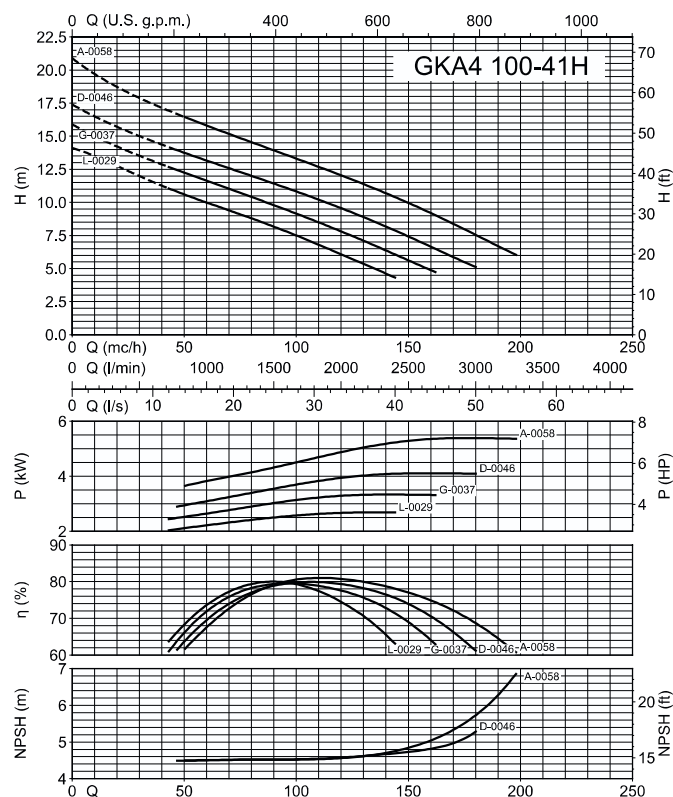
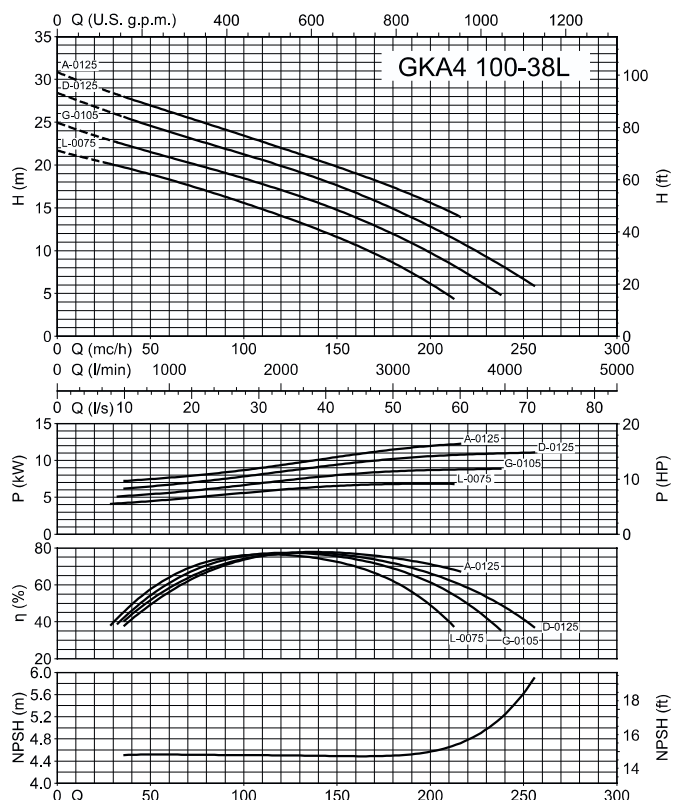
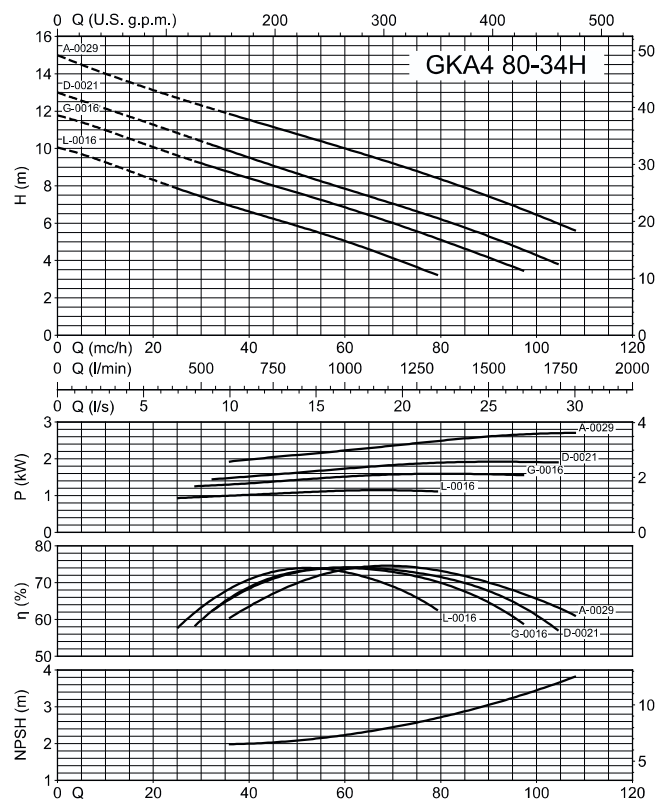
					Q = Flow										
					m³/h	0	54	72	90	108	126	144	162	180	198
Model	400V	690V	P2	l/min	900		1200	1500	1800	2100	2400	2700	3000	3300	
	A			kW	H (m) = Total head										
GKA4 100-41L-0029H	6,1	-	-	2.9		14,1	10,4	9,3	8,2	6,9	5,7	4,3	-	-	-
GKA4 100-41G-0037H	7,7	-	-	3.7		15,9	12	10,9	9,8	8,6	7,4	6,1	4,7	-	-
GKA4 100-41D-0046H	9,5	-	-	4.6		17,4	13,5	12,5	11,4	10,3	9,2	7,9	6,5	5,1	-
GKA4 100-41A-0058H	-	11.9	6,9	5.8		20,9	16,2	15,1	13,9	12,8	11,7	10,4	9	7,5	6,1

				Q = Flow															
				m³/h	0	18	36	54	72	90	108	126	144	162	180	216	252	288	324
Model	400V	690V	P2	l/min		300	600	900	1200	1500	1800	2100	2400	2700	3000	3600	4200	4800	5400
	A		kW	H (m) = Total head															
GKA4 100-45L-0165N	31,2	18	16,5		30	29	28,1	27,3	26,4	25,4	24,4	23,3	22,1	20,9	19,7	17,4	15,1	-	-
GKA4 100-45G-0193N	38,8	22,4	19,3		33,7	32,8	31,9	31	30,1	29,1	28,1	27	25,9	24,8	23,6	21,3	18,9	-	-
GKA4 100-45D-0210N	39	22,5	21		37,2	36,2	35,2	34,2	33,3	32,4	31,4	30,4	29,3	28,2	26,9	24,3	21,6	-	-
GKA4 100-45A-0260N	47.2	27.3	26		40	38,8	37.8	36.8	35.9	34.9	33.9	32.8	31.6	30.4	29.1	26.6	23.9	21.3	18.9

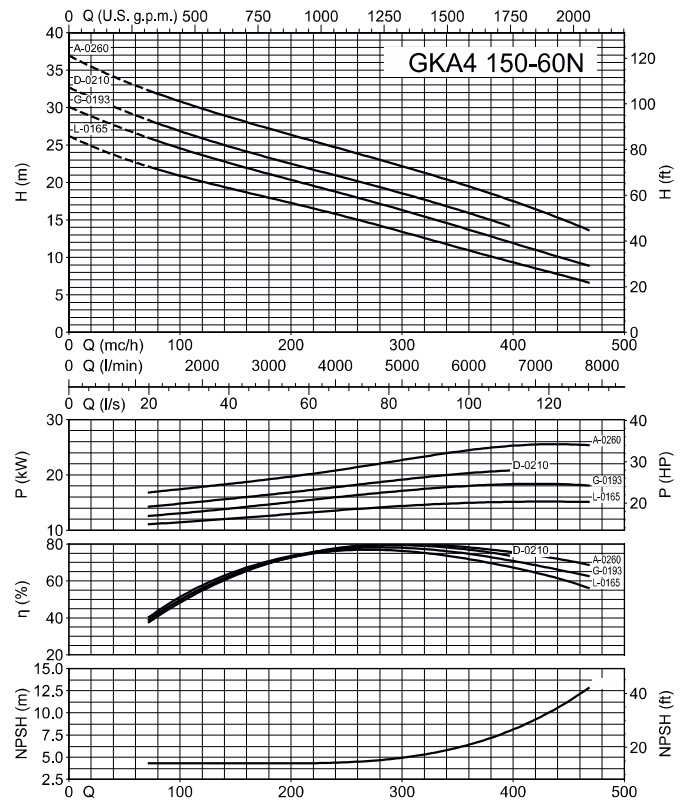
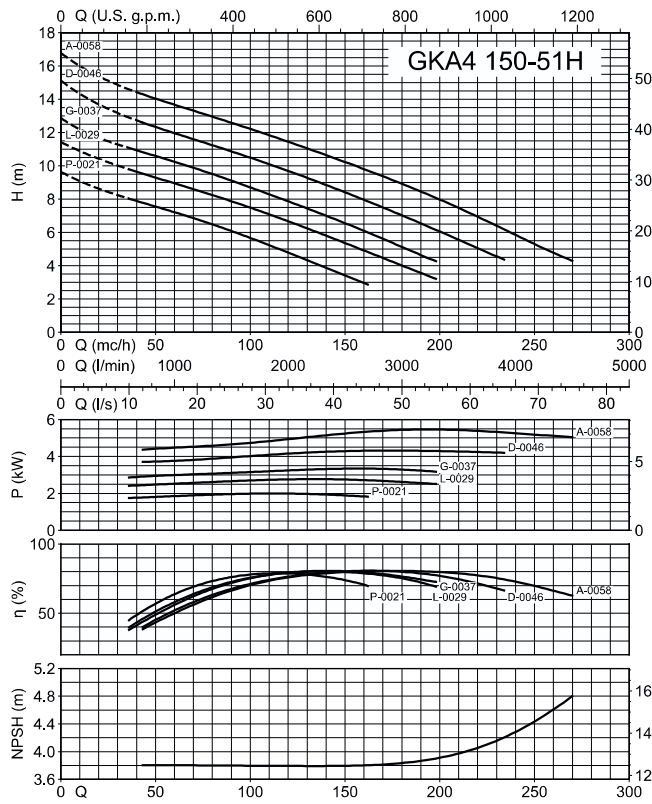
					Q = Flow													
					m³/h	0	28,8	36	54	72	90	108	126	144	162	180	216	252
Model	400V	690V	P2	l/min			480	600	900	1200	1500	1800	2100	2400	2700	3000	3600	4200
	A		kW	H (m) = Total head														
GKA4 150-51P-0021H	5	-	-	2.1		9,6	8,3	8	7,4	6,8	6,1	5,3	4,5	3,7	2,9	-	-	-
GKA4 150-51L-0029H	6,1	-	-	2.9		11,4	-	9,8	9,2	8,5	7,9	7,2	6,4	5,6	4,8	4	-	-
GKA4 150-51G-0037H	7,7	-	-	3.7		12,9	-	11,1	10,5	9,8	9,1	8,4	7,6	6,8	6	5,1	-	-
GKA4 150-51D-0046H	9,5	-	-	4.6		15,1	-	-	12,2	11,5	10,9	10,2	9,4	8,7	7,9	7	5,3	-
GKA4 150-51A-0058H	-	11.9	6.9	5.8		16.8	-	-	13.9	13.3	12.6	11.9	11.2	10.5	9.7	8.9	7.1	5.2

Model					Q = Flow														
					m³/h	0	25,2	36	54	72	90	108	126	144	162	180	216	252	288
					l/min		420	600	900	1200	1500	1800	2100	2400	2700	3000	3600	4200	4800
					400V	690V	P2	H (m) = Total head											
					A		kW												
GKA4 150-60L-0165N					31,2	18	16,5	26,2	24,6	24	23	22,1	21,3	20,6	19,9	19,2	18,6	18	16,7
GKA4 150-60G-0193N					38,8	22,4	19,3	30,1	28,5	27,9	26,9	25,9	25,1	24,2	23,4	22,6	21,9	21,1	19,7
GKA4 150-60D-0210N					39	22,5	21	32,7	31	30,4	29,3	28,3	27,4	26,5	25,6	24,8	24	23,3	21,9
GKA4 150-60A-0260N					47,2	27,3	26	36,9	35,1	34,4	33,3	32,3	31,3	30,4	29,6	28,8	28	27,2	25,7

Characteristic curves

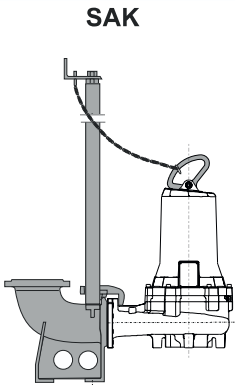


Characteristic curves

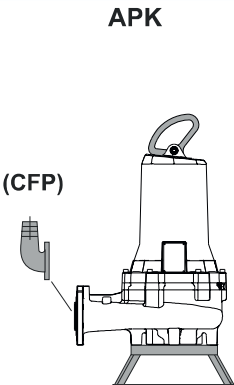


Dimensions and weight

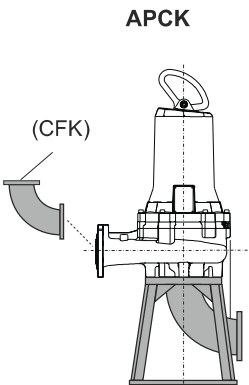
Duck foot coupling



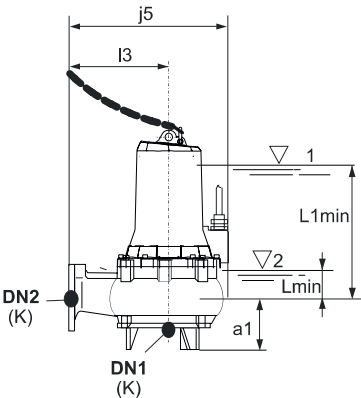
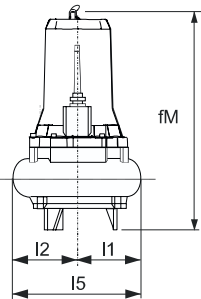
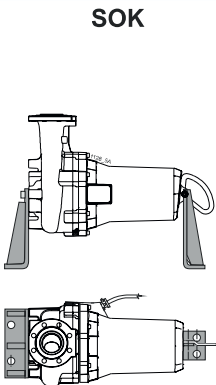
Submersible pump rest



Dry chamber pump rest



Dry chamber pump support



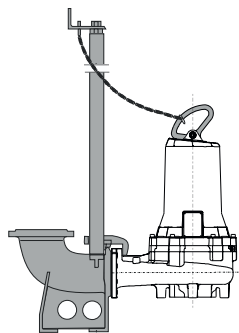
TYPE			mm									
	DN1	DN2	a1	fM	j5	K	l1	l2	l3	l5	L1min	Lmin
GKA4 80-34L-0016H	80	80	98	615.3	416	16	204.5	190.5	245	395	288	66
GKA4 80-34G-0016H	80	80	98	615.3	416	16	204.5	190.5	245	395	288	66
GKA4 80-34D-0021H	80	80	98	615.3	416	16	204.5	190.5	245	395	355	65
GKA4 80-34A-0029H	80	80	98	615.3	416	16	204.5	190.5	245	395	288	66

L1min = Minimum submergence depth for motor without casing with continuous duty S1 (NPSHR permitting)
Lmin = Minimum submergence depth for motor without casing with intermittent duty S3 (NPSHR permitting)

Dimensions and weight

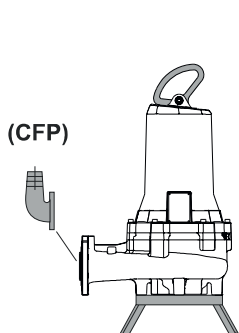
Duck foot coupling

SAK



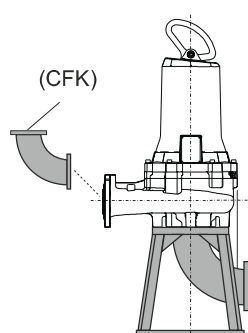
Submersible pump rest

APK



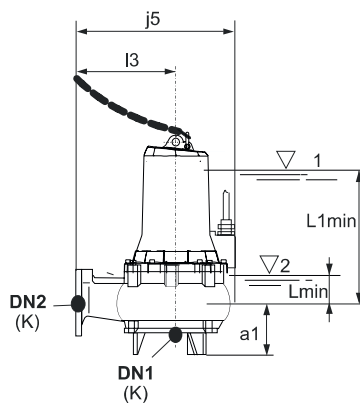
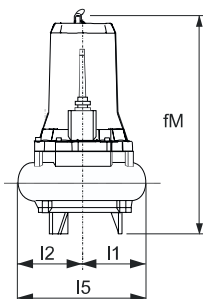
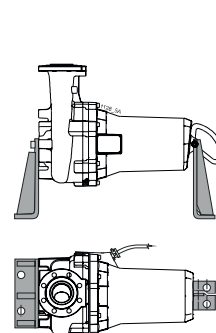
Dry chamber pump rest

APCK



Dry chamber pump support

SOK



TYPE			mm									
	DN1	DN2	a1	fM	j5	K	l1	l2	l3	l5	L1min	Lmin
GKA4 100-38L-0075L	100	100	113.2	763.6	530	16	236.5	228	320	464.5	420.4	69.4
GKA4100-38G-0105L	100	100	113.2	766	530	16	236.5	228	320	464.5	420.4	69.4
GKA4 100-38D-0125L	100	100	113.2	766	530	16	236.5	228	320	464.5	420.4	69.4
GKA4 100-38A-0125L	100	100	113.2	766	530	16	236.5	228	320	464.5	420.4	69.4
GKA4 100-41L-0029H	100	100	116	635.3	492	16	204.5	213.3	300	402.5	289	69
GKA4 100-41G-0037H	100	100	116	704.4	492	16	221	213.3	300	419	324	69
GKA4 100-41D-0046H	100	100	116	704.4	492	16	221	213.3	300	419	324	69
GKA4 100-41A-0058H	100	100	116	704.4	492	16	221	213.3	300	434.3	324	69
GKA4 150-51P-0021H	150	150	132	659.3	570	16	224.2	241.2	344	465.4	387.5	167.5
GKA4 150-51L-0029H	150	150	132	659.3	570	16	224.2	241.2	344	465.4	297.5	77.5
GKA4 150-51G-0037H	150	150	132	728.4	570	16	224.2	241.2	344	465.4	332.5	77.5
GKA4 150-51D-0046H	150	150	132	728.4	570	16	224.2	241.2	344	465.4	332.5	77.5
GKA4 150-51A-0058H	150	150	132	728.4	570	16	224.2	241.2	344	465.4	332.5	77.5

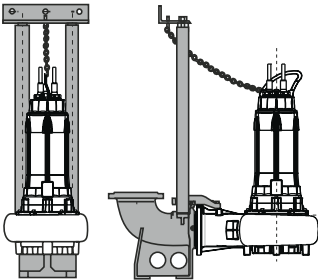
L1min = Minimum submergence depth for motor without casing with continuous duty S1 (NPSHR permitting)

Lmin = Minimum submergence depth for motor without casing with intermittent duty S3 (NPSHR permitting)

Dimensions and weight

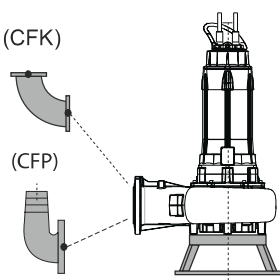
Duck foot coupling

SAK



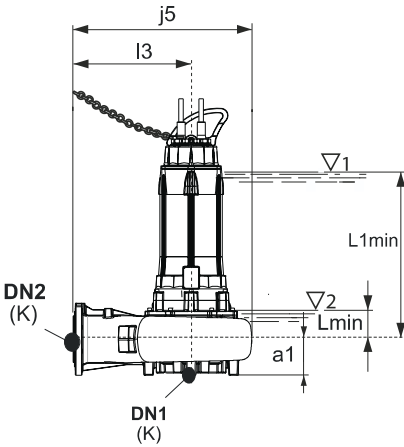
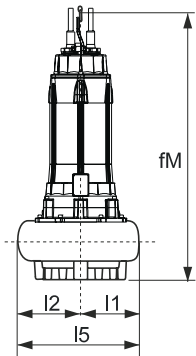
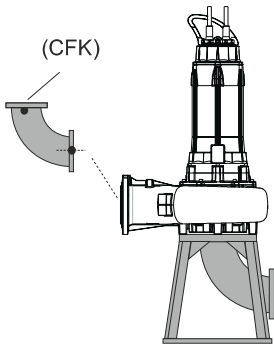
Submersible pump rest

APK



Dry chamber pump rest

APCK



TYPE	mm											
	DN1	DN2	a1	fM	j5	K	l1	l2	l3	l5	L1min	Lmin
GKA4 100-45L-0165N	150	100	122.8	1184.2	621.3	16	226.8	259.2	380	486	776.4	155.4
GKA4 100-45G-0193N	150	100	122.8	1184.2	621.3	16	226.8	259.2	380	486	776.4	155.4
GKA4 100-45D-0210N	150	100	122.8	1184.2	621.3	16	226.8	259.2	380	486	776.4	155.4
GKA4 100-45A-0260N	150	100	122.8	1184.2	621.3	16	226.8	259.2	380	486	776.4	155.4
GKA4 150-60L-0165N	150	150	138	1208.5	662.3	16	228.8	286.2	405	515	785.5	164.5
GKA4 150-60G-0193N	150	150	138	1208.5	662.3	16	228.8	286.2	405	515	785.5	164.5
GKA4 150-60D-0210N	150	150	138	1208.5	662.3	16	228.8	286.2	405	515	785.5	164.5
GKA4 150-60A-0260N	150	150	138	1208.5	662.3	16	228.8	286.2	405	515	785.5	164.5

L1min = Minimum submergence depth for motor without casing with continuous duty S1 (NPSHR permitting)
Lmin = Minimum submergence depth for motor without casing with intermittent duty S3 (NPSHR permitting)