



better together



Electrical submersible pumps

- steel
- blue
- bluePRO
- E Series



Lifting stations

- Flood pump kit
- miniBOX
- nanoBOX
- blueBOX



Hydraulic accessories



Electrical accessories



EN
50 Hz



Find your Zenit solution for domestic market

All Zenit products are designed with the same mission in mind: to satisfy our customers' needs.



INDEX

ZENIT Group	4
Domestic applications	6
Electrical submersible pumps	9
Lifting stations	56
Accessories	68
ZENO Navigator Suite	80
Product overview	82



better together

Zenit Group

About us

Zenit's history began more than 60 years ago in a small engineering workshop in Modena.

Today, it has grown into a company with strong international presence, supported by hundreds of loyal employees, partners and associates all over the world.

We are different from our competitors because we put our customers' needs before all else and our strategies for growth are shaped according to their needs, first and foremost.

What we do

Our core business is the design, manufacture and distribution of electric submersible pumps for residential and industrial use.

We offer a wide range of lifting stations, aeration, mixing products, control and monitoring devices.

We also provide complete packages of water treatment solutions with their respective complementary services.

We are capable of taking on the most demanding challenges.

How we operate

A customer-oriented approach, a penchant for innovation and specialisation are the salient qualities that have led us to constant growth.

We believe in being there for our customers when they need us.

We support and work alongside you in all phases

of your projects, from the initial consultation to product/plant design and then to implementation with intensive supervision and finally to a complete and comprehensive after-sales service.

To us, our customers are our topmost priority.





The solution for you

Zenit offers:

- A wide range of customised solutions for industrial, domestic and civil plants.
- Products that adapt to challenging conditions minimizing implementation as well as running costs, yet maintaining efficiency.
- Standardised components and spare parts for faster and lower after sales-service cost.
- Complete pre and after-sales service to enhance your experience with us, as we thrive on the relationship with our customers, built on trust and integrity.

ZENIT GROUP IS THE RESULT OF
A SUCCESSFUL COMBINATION OF
ENTREPRENEURIAL STRATEGIES AND
INSIGHTS

Our Organisation

Zenit is a company with international presence. We manage our customers' needs directly thanks to our territorial access to the world.

The current structure of Zenit Group is the result of entrepreneurial strategies and insights that have enabled its internationalisation.

Zenit Group is composed of different units, which manufacture and distribute wastewater treatment products across the globe, each of them with its own organisation but all operating in pursuit of a shared goal.



Modena
Italy



Bascharage
Luxembourg



Suzhou
China



Singapore
Singapore

Fields of application

In domestic and residential plumbing systems, the presence of various types of landscapes means that a wide range of compatible products is essential to counter any elevation of or depression in the site.

Collection tanks and submersible pumps are normally used in the storage, lifting and disposal of liquid waste.

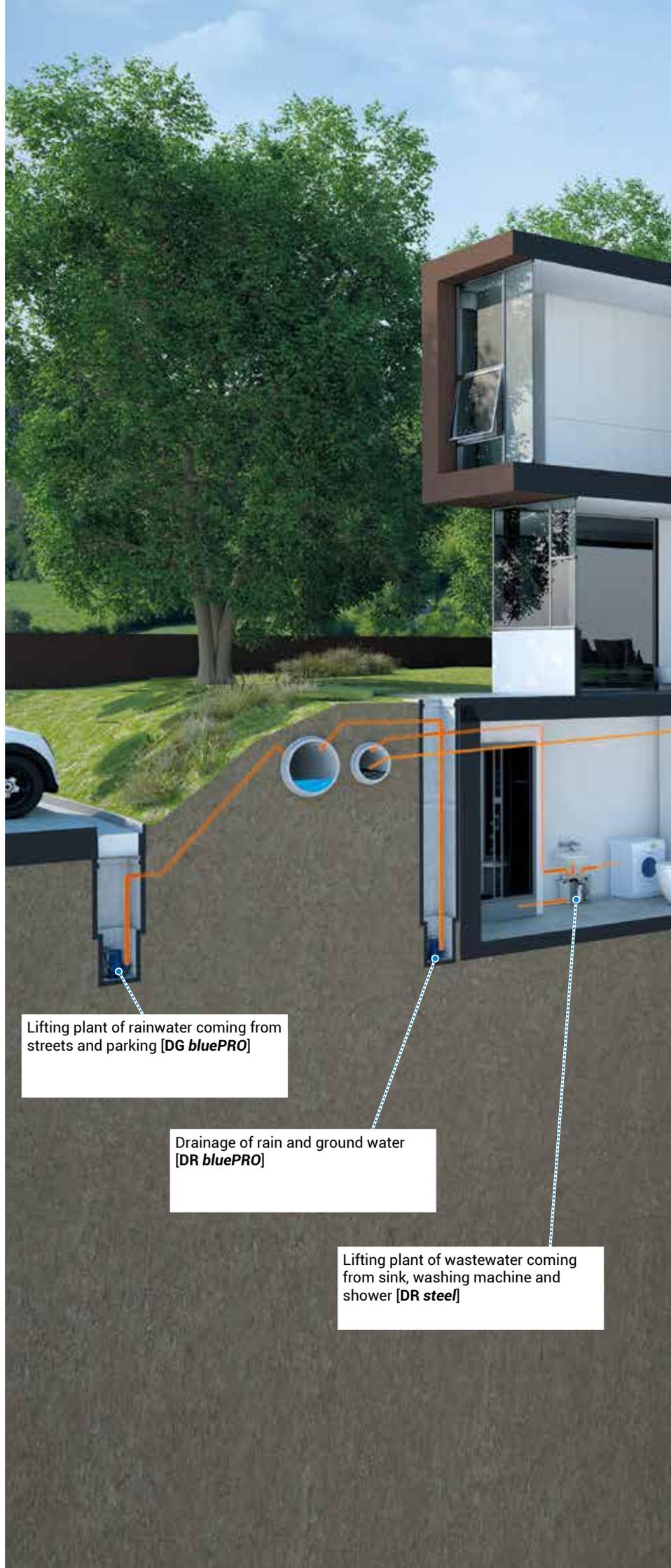
The products we offer minimize installation time which in turn reduces installation costs.

We make sure that our company works with you for the entire process from consulting to implementation to further save on costs and time.

To meet these needs Zenit, with more than sixty years' experience in the water treatment sector, has created an offering of electric pumps and lifting stations suitable for domestic and residential applications, even in the harshest and most adverse conditions.

These products are made with reliable and durable material of superior quality, built to suit any type of landscape.

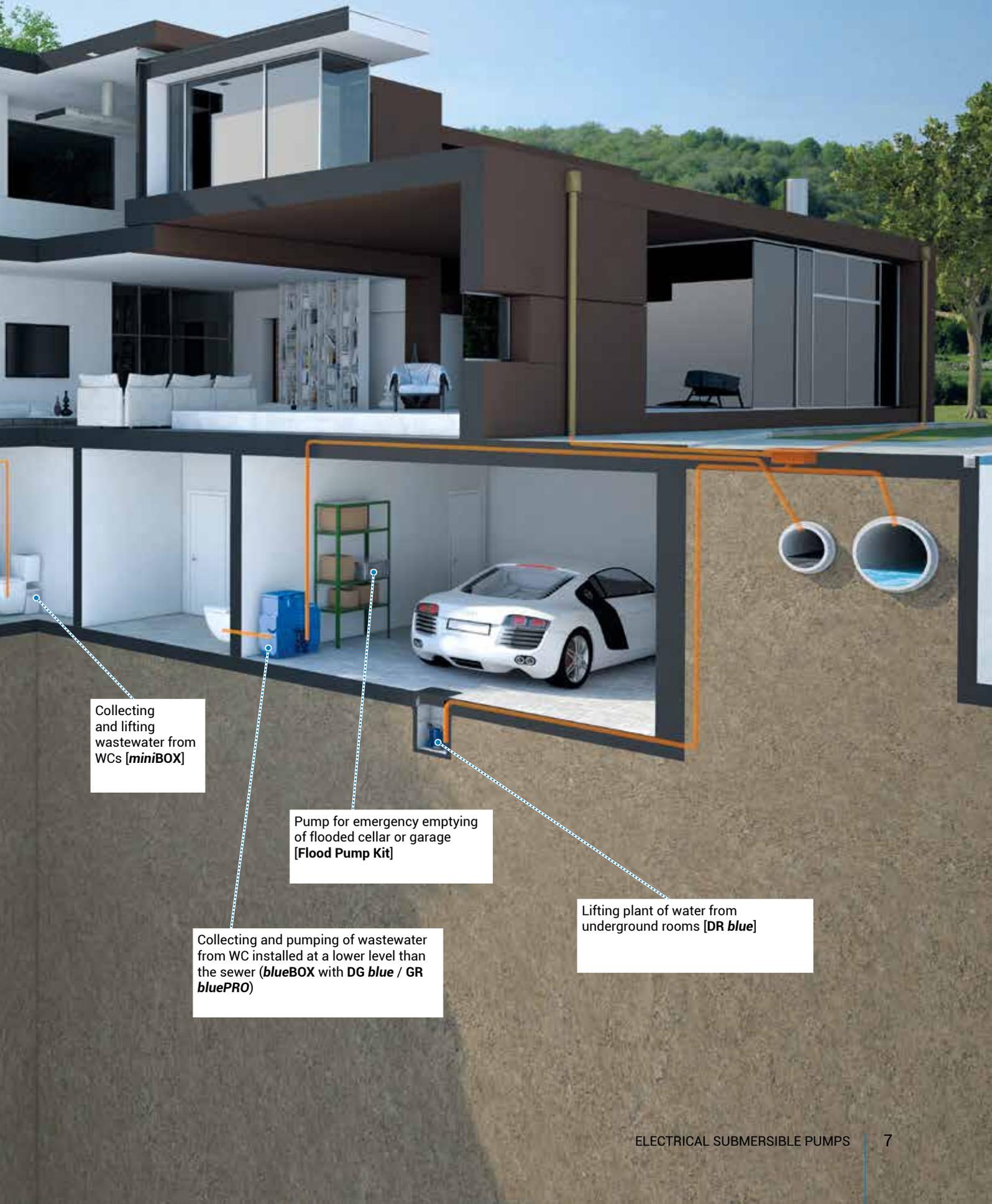
They come with a wide range of accessories which enhance and complement their functions.



Lifting plant of rainwater coming from streets and parking [DG bluePRO]

Drainage of rain and ground water [DR bluePRO]

Lifting plant of wastewater coming from sink, washing machine and shower [DR steel]



Collecting and lifting wastewater from WCs [**miniBOX**]

Pump for emergency emptying of flooded cellar or garage [**Flood Pump Kit**]

Collecting and pumping of wastewater from WC installed at a lower level than the sewer (**blueBOX** with **DG blue** / **GR bluePRO**)

Lifting plant of water from underground rooms [**DR blue**]

ZENIT

PRODUCT RANGE

- › **Electrical submersible pumps**
- › Lifting stations
- › Accessories



Electrical submersible pumps

steel • blue • bluePRO • E Series



Series

steel



Stainless steel electrical submersible pumps.
Dry motor with power from 0.25 to 0.75 kW

	DG	DR
Pump material		
Cast iron	-	-
Pressed steel	●	●
Impeller material		
Cast iron	-	-
Pressed steel	●	●
Techno-polymer	-	-
Type of hydraulics		
Hydraulics for clear wastewaters with suction strainer	-	●
Vortex hydraulics for wastewaters with solid bodies	●	-
High pressure hydraulics with suction strainer	-	-
High pressure hydraulics with grinding system	-	-
Discharge		
Vertical discharge	●	●
Horizontal discharge	-	-
Phases		
Single-phase	●	●
Three-phase	●	●
Submerged or dry installation		
Pumps for submerged installation only	●	●
Pumps with cooling jacket as standard	●	●
Specific certifications		
IECEX / SASO / ATEX	SASO	

MACHINERY DIRECTIVE 2006/42/EC
 LOW VOLTAGE DIRECTIVE 2014/35/UE
 ELECTROMAGNETIC COMPATIBILITY DIRECTIVE 2014/30/UE
Standards applied: EN ISO 12100:2010; CEI EN 60034-5:2001+A1:2007; CEI EN 60034-1:2011; ISO 9906:2012; UNI EN 809:2009
For single-phase electrical submersible pumps only: IEC 60335-1:2013; IEC 60335-2-41:2012.

steel Series

High-performance, compact stainless steel submersible pumps for optimal service in household installations and small civil plants.

Two different types of hydraulics are available for the maximum flexibility: DRENO (**DR steel**) with multi-channel open impeller for applications with clear or slightly soiled wastewaters; and DRAGA (**DG steel**) impeller for applications with heavily soiled wastewaters and solid bodies, thanks to the free passage of up to 40 mm.

The cooling system allows these pumps to be used even when only partially submerged and in particular the **DR steel** version is easily converted into a dry floor pump, with suction levels as little as 5 mm above

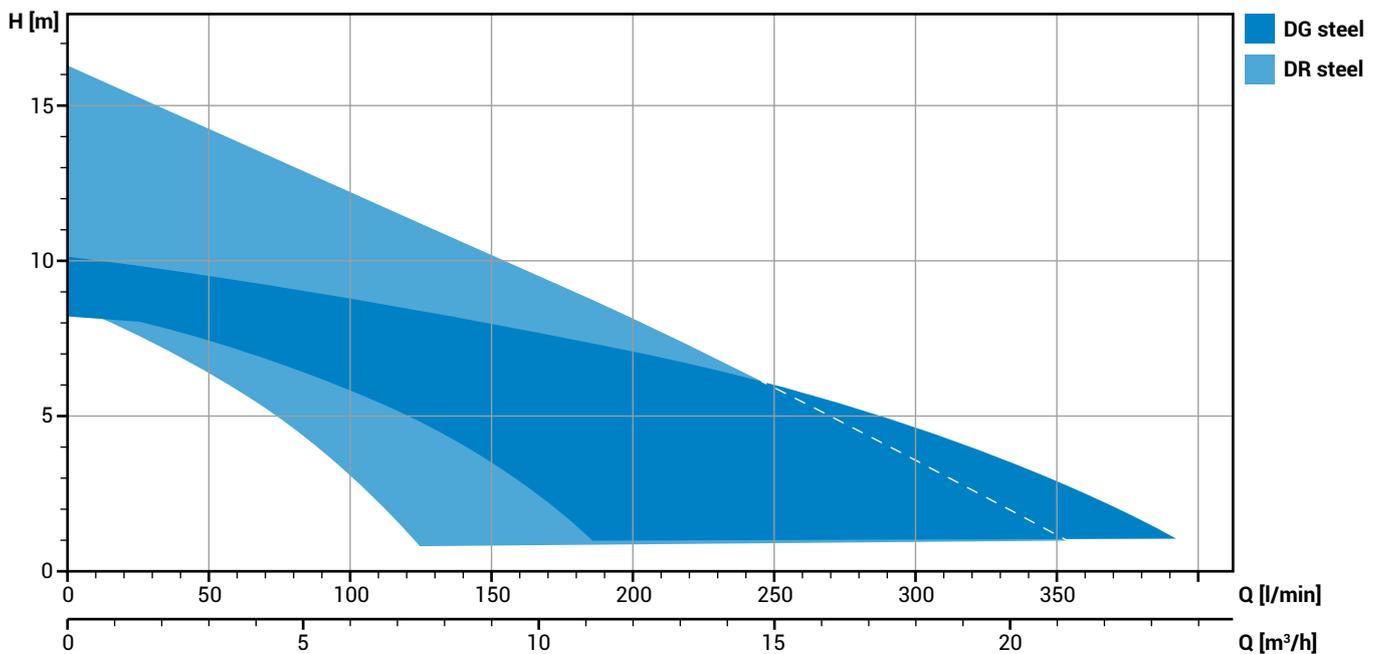
the ground.

Every model undergoes pressurised testing to guarantee perfect assembly and operation of the gaskets, cable gland and mechanical seals.

Thanks to their convenience and ease of handling, steel models can also be used in emergencies for pumping-out flooding premises or for temporary installations for pumping from wells and tanks.

What's more, the **DR steel** version also provides an excellent lifting station installed inside the **nanoBOX** tank for the collection and transfer of domestic wastewaters.

Operating ranges



Construction materials

Case	Stainless steel - AISI 304
Impeller	Stainless steel - AISI 304
Nuts and bolts	Stainless steel - Class A2-70
Standard gasket	Rubber - NBR
Shaft	Stainless steel - AISI 431

Operating specifications

Max operating temperature	40°C [90°C max 3 min]
pH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm ² /s
Maximum immersion depth	10 m
Density of treated fluid	1 Kg/dm ³
Maximum acoustic pressure	<70 dB
Max starts per hour	30

The data provided are not binding.
Zenit reserves the right to modify the product without advance notification.

DG *steel*



DG [DRAGA]



- Stainless steel vortex impeller
- Large free passage

- Sewage
- Soiled wastewaters with solids
- Lifting stations in small civil plants

DR *steel*



DR [DRENO]



- Stainless steel multi-channel open impeller
- Stainless steel suction strainer

- Clear or slightly soiled wastewaters
- Pumping-out flooded premises
- Garden sprinklers and pumping from tanks

Range characteristics

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.37 ÷ 0.75 kW
Poles	2
Discharge	vertical G 1¼" - G 1½"
	horizontal -
Free passage	max 40 mm
Max flow rate	378 l/min
Max head	10.0 m

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.25 ÷ 0.75 kW
Poles	2
Discharge	vertical G 1¼" - G 1½"
	horizontal -
Free passage	max 12 mm
Max flow rate	335 l/min
Max head	16.0 m

steel Series



HANDLE

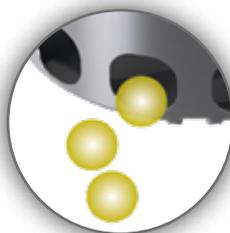
In AISI 304 stainless steel with ergonomic, insulating technology-polymer coating.

ADJUSTABLE FLOAT SWITCH

Float switch stroke adjustment system for modification of start-stop levels.

CABLE GLAND

Cable gland system with dual safety device to prevent disconnection even in case of accidental pulling.



FREE PASSAGE [DG steel]

Free passage up to 40 mm.



SLIDING VERTICAL FLOAT SWITCH [Optional]

The float switch stroke can be adjusted to modify the start/stop level and optimise operation. The vertical travel level switch is available for installation in small pits.

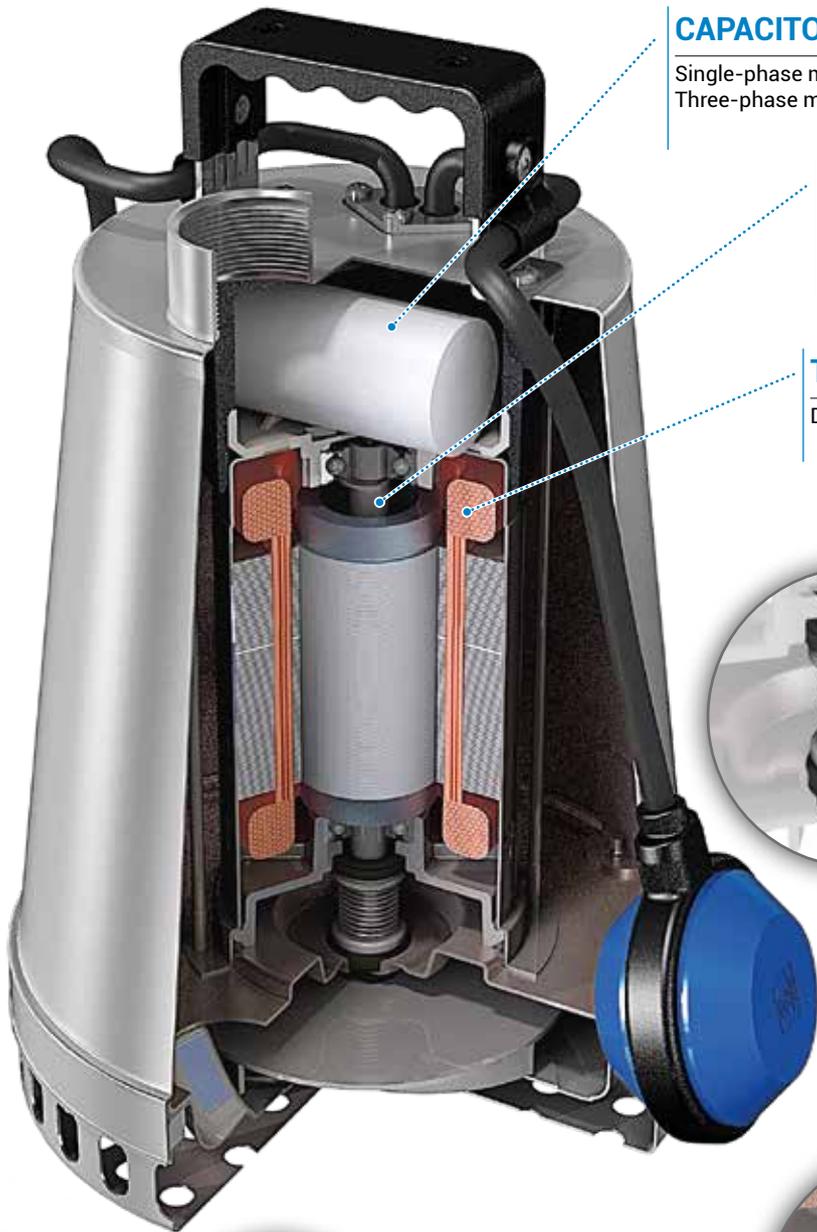
Highlight



COOLING SYSTEM

The cooling jacket ensures an optimal motor temperature even with the pump only partially submerged.

steel Series



CAPACITOR/RELAY

Single-phase models have internal capacitor.
Three-phase models have relay for float-switch control of start/stop cycles.

DRIVE SHAFT

Integral drive shaft in AISI 431 stainless steel for high strength and to allow use with brine or chlorine.

THERMAL PROTECTION

Dry motor protection with thermal overload.

MECHANICAL SEALS

Double silicon carbide seal in oil chamber with food-grade oil lubrication.

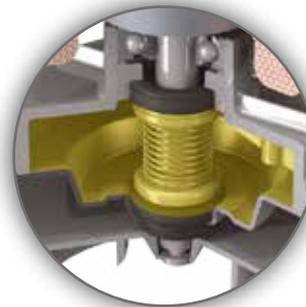


V-RING

The V-Ring in direct contact with the liquid protects the mechanical seals from foreign bodies to keep them in good working condition.

OIL CHAMBER

Large oil chamber guarantees long mechanical seal lifetime.



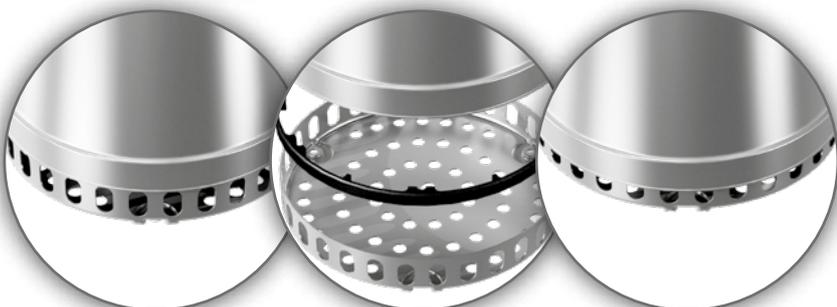
IMPELLER

In AISI 304 stainless steel.



STRAINER [DR steel]

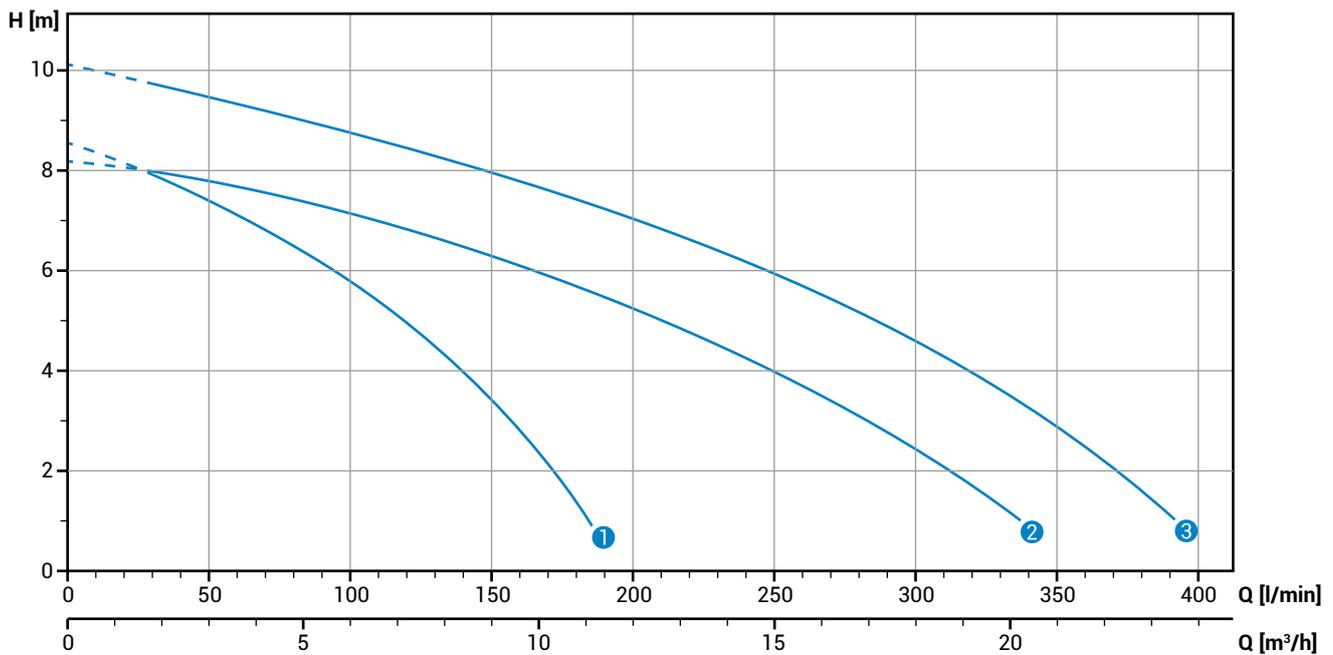
The DR steel easily converts from an ordinary submersible pump to a dry floor unit. When operating in this mode, the suction level can be reduced to as little as 5 mm above the ground.



Models with vertical threaded discharge [GAS 1¼" - GAS 1½"] - 2 poles

Performances

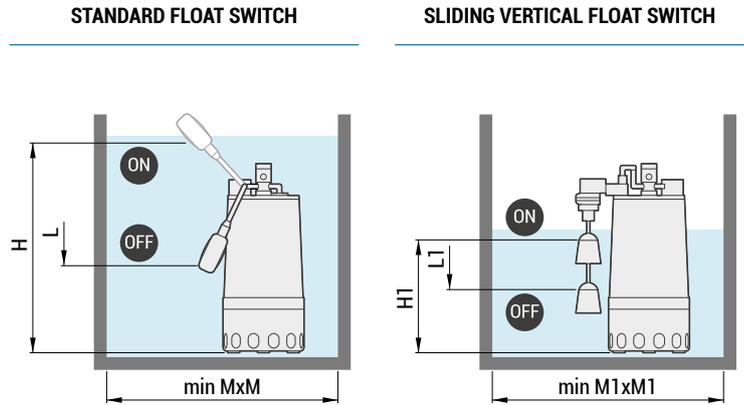
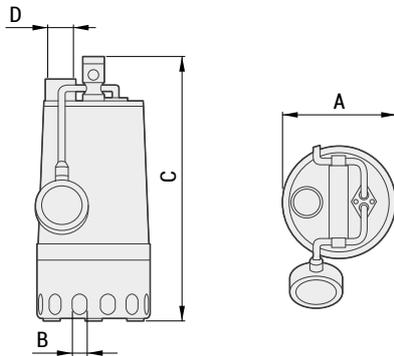
	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
	l/min	0	30	60	90	120	150	180	210	240	270	300	330	360
	m³/h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9	21.7
① DG steel 37/2 M50			7.6	7.1	6.1	5.0	3.4	1.3						
② DG steel 55/2 M50			7.8	7.5	7.0	6.6	6.2	5.7	4.8	4.1	3.2	2.3	2.3	
③ DG steel 75/2 M[T]50			9.5	9.2	8.6	8.2	7.8	7.5	6.7	6.0	5.2	4.1	3.2	2.1



Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DG steel 37/2 M50	230	1	-	0.37	3.0	2900	G 1¼"	25 mm
② DG steel 55/2 M50	230	1	-	0.55	4.3	2900	G 1½"	40 mm
③ DG steel 75/2 M50	230	1	-	0.75	5.6	2900	G 1½"	40 mm
③ DG steel 75/2 T50	400	3	-	0.75	2.4	2900	G 1½"	40 mm

Dimensions



Overall dimensions (mm)

	A	B	C	D	H	L	M	H1	L1	M1	kg	X	Y	Z	Pieces per pallet 1000x1200 mm	
DG steel 37/2 M50	170	20	350	G 1 1/4"	435	195	350	205	115	300	6.6	200	200	400	90 (30x3)	60 (20x3)
DG steel 55/2 M50	170	40	400	G 1 1/2"	450	200	400	250	140	350	8.1	240	250	470	60 (20x3)	60 (20x3)
DG steel 75/2 M50	210	40	400	G 1 1/2"	450	200	400	250	140	350	8.9	240	250	470	60 (20x3)	60 (20x3)
DG steel 75/2 T50	210	40	400	G 1 1/2"	450	200	400	250	140	350	8.9	240	250	470	60 (20x3)	60 (20x3)

M - M1 Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

- TCG Thermal protection, capacitor, float switch
- TCW Thermal protection, capacitor, capacitor, travel float switch

Three-phase models

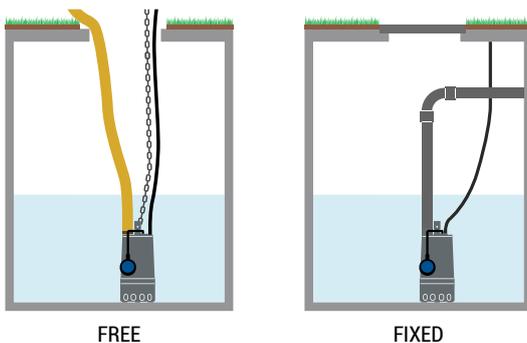
- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

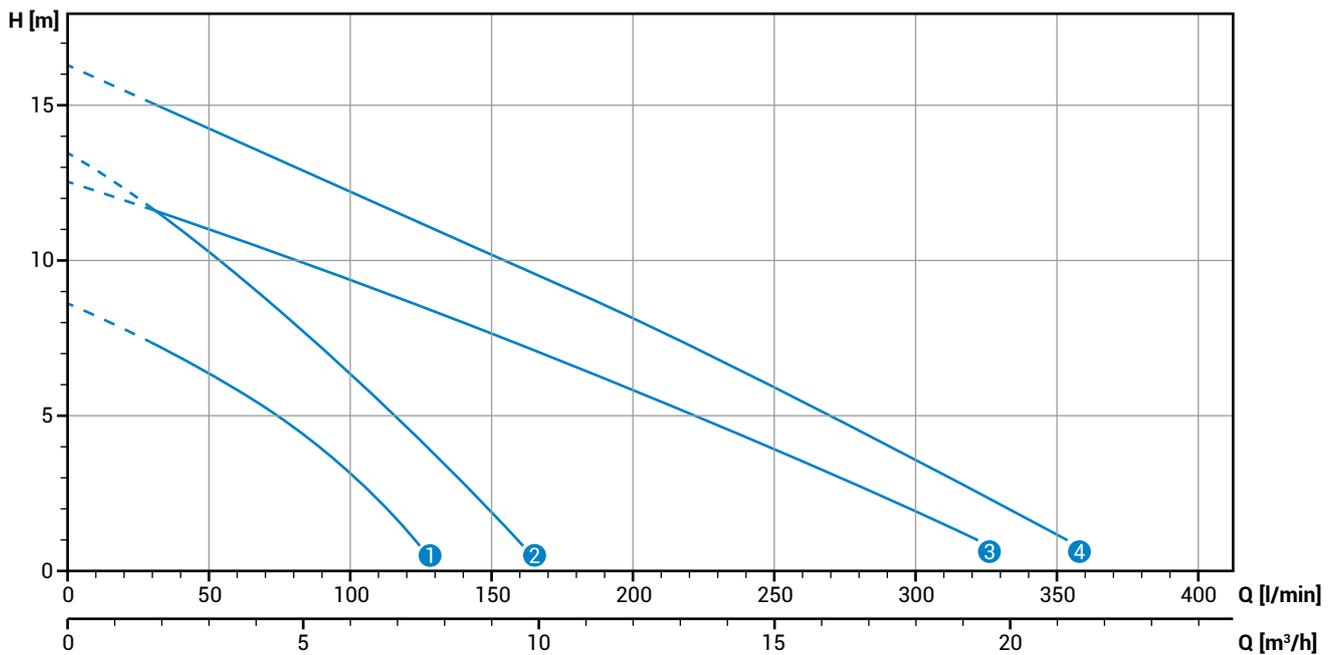
Installations



Models with vertical threaded discharge [GAS 1¼" - GAS 1½"] - 2 poles

Performances

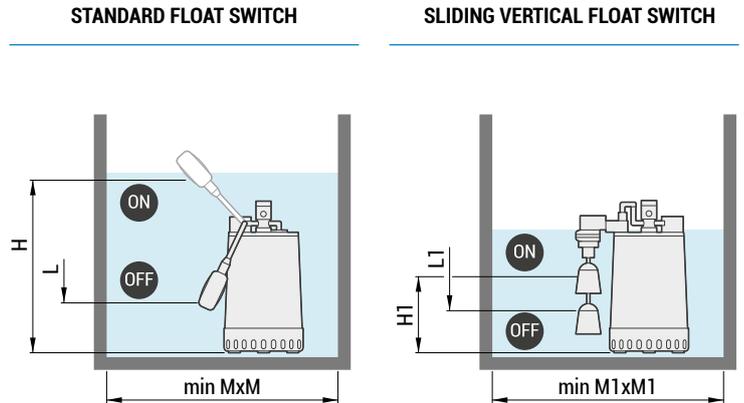
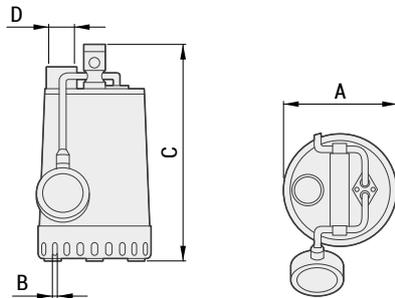
	l/s	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5
	l/min	0	30	60	90	120	150	180	210	240	270	300	330
	m³/h	0	1.8	3.6	5.4	7.2	9.0	10.8	12.7	14.5	16.3	18.1	19.9
① DR steel 25/2 M50			7.0	5.7	4.0	1.3							
② DR steel 37/2 M50			11.6	9.5	7.0	4.5	1.9						
③ DR steel 55/2 M50			11.3	10.4	9.2	8.4	7.2	6.3	5.0	4.0	3.0	1.8	
④ DR steel 75/2 M[T]50			15.0	13.4	12.4	11.2	10.0	8.8	7.6	6.5	5.2	3.8	2.5



Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DR steel 25/2 M50	230	1	-	0.25	2.3	2900	G 1¼"	10 mm
② DR steel 37/2 M50	230	1	-	0.37	3.1	2900	G 1¼"	10 mm
③ DR steel 55/2 M50	230	1	-	0.55	4.3	2900	G 1½"	12 mm
④ DG steel 75/2 M50	230	1	-	0.75	5.6	2900	G 1½"	12 mm
④ DG steel 75/2 T50	400	3	-	0.75	2.4	2900	G 1½"	12 mm

Dimensions



Overall dimensions (mm)

	A	B	C	D	H	L	M	H1	L1	M1	kg	X	Y	Z	Pieces per pallet 1000x1200 mm	
DR steel 25/2 M50	170	10	300	G 1 1/4"	385	145	350	155	65	300	5.9	200	200	350	90 (30x3)	60 (20x3)
DR steel 37/2 M50	170	10	300	G 1 1/4"	385	145	350	155	65	300	6.3	240	250	400	90 (30x3)	60 (20x3)
DR steel 55/2 M50	215	12	335	G 1 1/2"	420	180	400	190	100	350	7.7	240	250	400	60 (20x3)	60 (20x3)
DR steel 75/2 M[T]50	215	12	335	G 1 1/2"	420	180	400	190	100	350	8.4	240	250	400	60 (20x3)	60 (20x3)

M - M1 Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

- TCG Thermal protection, capacitor, float switch
- TCW Thermal protection, capacitor, capacitor, travel float switch
- TR Thermal protection, relay for motor protection

Three-phase models

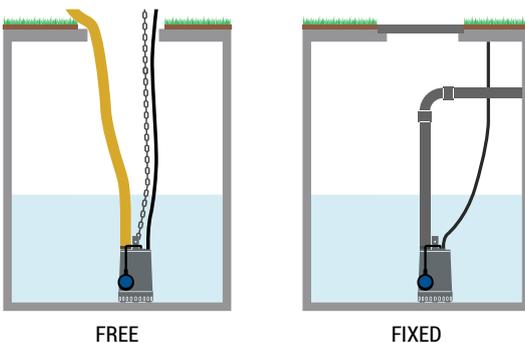
- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

Installations



blue Series

The **blue Series** is intended mainly for domestic and residential installations and provides compact size and outstanding reliability.

Versions are available with two different hydraulics: DRENO (**DR blue**), with multi-channel open impeller for clear or slightly soiled wastewaters; and DRAGA (**DG blue**), with vortex impeller and large free passage for pumping wastewaters with heavy soil, for use with **blueBOX** lifting stations.

Meticulous design and the use of high-grade materials allow easy maintenance and make the replacement of parts subject to wear simple and

less frequent than on other models in the same price band.

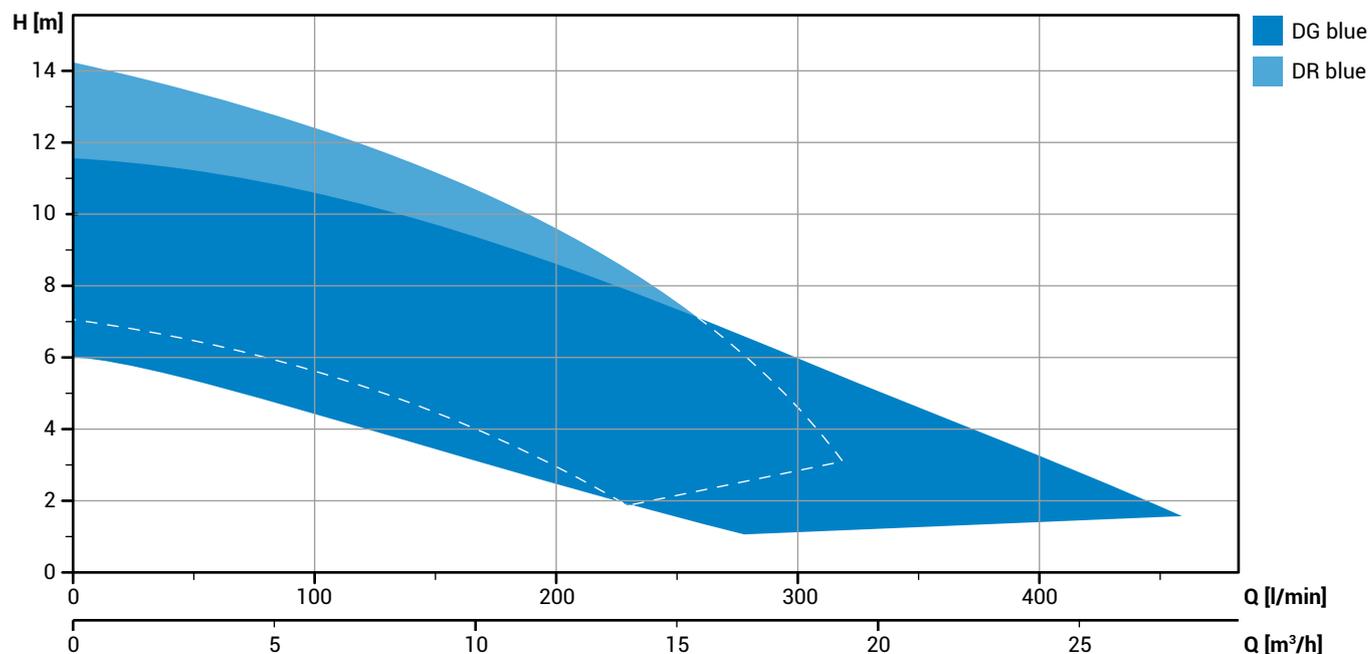
Every model undergoes pressurised testing to guarantee perfect assembly and operation of the gaskets, cable gland and mechanical seals.

blue Series pumps are rugged and reliable, suitable for permanent installations yet also, thanks to their convenience and ease of handling, ideal for emergency use for pumping-out flooding premises or for temporary installations for pumping from wells and tanks.

Models available in IECEx certified version

Ex ec nC h IIC T3 Gc (~1)
Ex ec h IIC T3 Gc (~3)

Operating ranges



Construction materials

Case	Cast iron EN-GJL-250
Impeller	Techno-polymer
Nuts and bolts	Stainless steel - Class A2-70
Standard gasket	Rubber - NBR
Shaft	Stainless steel - AISI 431
Paint type	Ecological bicomponent epoxy (medium thickness 120 µm)

Operating specifications

Max operating temperature	40°C [90°C max 3 min]
pH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm²/s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm³
Maximum acoustic pressure	<70 dB
Max starts per hour	30

The data provided are not binding. Zenit reserves the right to modify the product without advance notification.

DG *blue*



DG [DRAGA]



- Techno-polymer vortex impeller
- Full free passage

- Sewage
- Soiled wastewaters with solids
- Lifting stations in small civil and residential plants

DR *blue*



DR [DRENO]



- Techno-polymer multi-channel open impeller
- Techno-polymer suction strainer

- Clear or slightly soiled wastewaters
- Strained, seepage and underground pump-out waters
- Irrigation and pumping from wells and reservoirs

Range characteristics

Power supply		220/240V ~1
Frequency		50 Hz
Power		0.3 ÷ 0.74 kW
Poles		2
Discharge	vertical	G 1½"
	horizontal	-
Free passage		40 mm
Max flow rate		462 l/min
Max head		11.6 m

Power supply		220/240V ~1
Frequency		50 Hz
Power		0.3 ÷ 0.74 kW
Poles		2
Discharge	vertical	G 1¼"
	horizontal	-
Free passage		7 mm
Max flow rate		318 l/min
Max head		14.0 m

blue Series



HANDLE

Ergonomic handle styled for optimal grip. Shaped to take a shackle to hold the pump steady during handling.

ADJUSTABLE FLOAT SWITCH

Float switch stroke adjustment system for modification of start-stop levels.



CABLE GLAND

Innovative cable gland system with cable holder system and twin O-rings to ensure maximum tightness. Simpler extraction for maintenance.

CAPACITOR

Single-phase models have internal capacitor.



CASE

EN-GJL-250 cast iron construction guarantees solidity and durability even in case of maintenance requiring removal and replacement of the motor.

Highlight



EASY MAINTENANCE

During the design phase, special care was taken over the choice of components and materials, not only to ensure excellent quality but also to simplify routine maintenance and allow any repairs to be carried out using commercially available tools.

This makes the **blue Series** quicker and easier to maintain than competitor models.

blue Series



PRESSURISED TESTING

Stud bolt for closing the motor compartment for the pressurised testing every model undergoes.



MECHANICAL SEALS

One mechanical seal in silicon carbide (SiC) and one mechanical seal in alumina graphite (AL), both in oil chamber.



V-RING

The V-Ring in direct contact with the liquid protects the mechanical seals from foreign bodies to keep them in good working condition.



OIL CHAMBER

Guarantees longer mechanical seal lifetime and is easily accessible to simplify maintenance procedures.



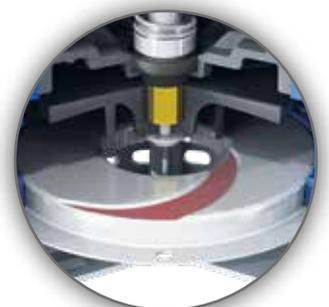
FREE PASSAGE [DG blue]

Full free passage allowing the expulsion of solids of 40 mm and preventing fouling of the impeller.



ANTI-CLOGGING SYSTEM [DR blue]

Stainless steel diffuser plate. Ensures the expulsion of small suspended solids and prevents fouling of the impeller.

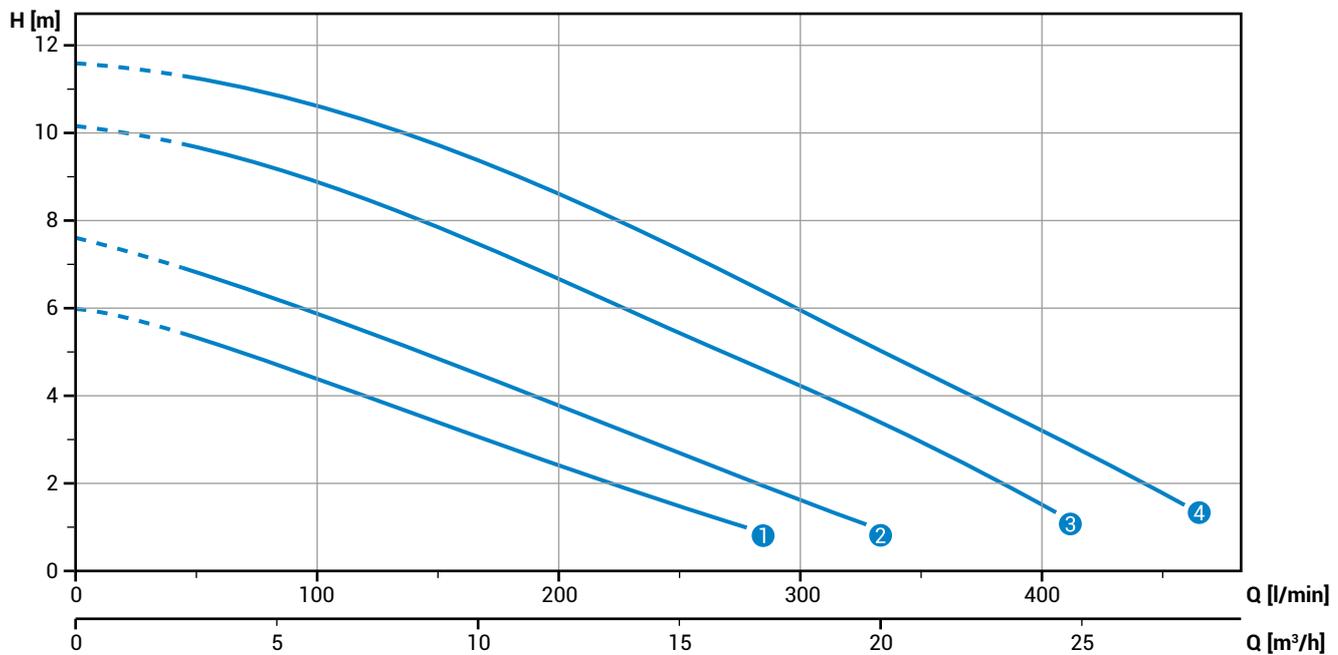


DG *blue*

Models with vertical threaded discharge [GAS 1½"] - 2 poles

Performances

	l/s	0	1	2	3	4	5	6	7
	l/min	0	60	120	180	240	300	360	420
	m³/h	0	3.6	7.2	10.8	14.4	18.0	21.6	25.2
①	DG blue 40/2/G40V A1BM5		5.2	4.0	2.8	1.7			
②	DG blue 50/2/G40V A1BM5		6.7	5.5	4.2	2.9	1.6		
③	DG blue 75/2/G40V A1BM5		9.5	8.5	7.2	5.7	4.2	2.6	
④	DG blue 100/2/G40V A1BM5		11.2	10.2	9.1	7.6	6.0	4.3	2.7

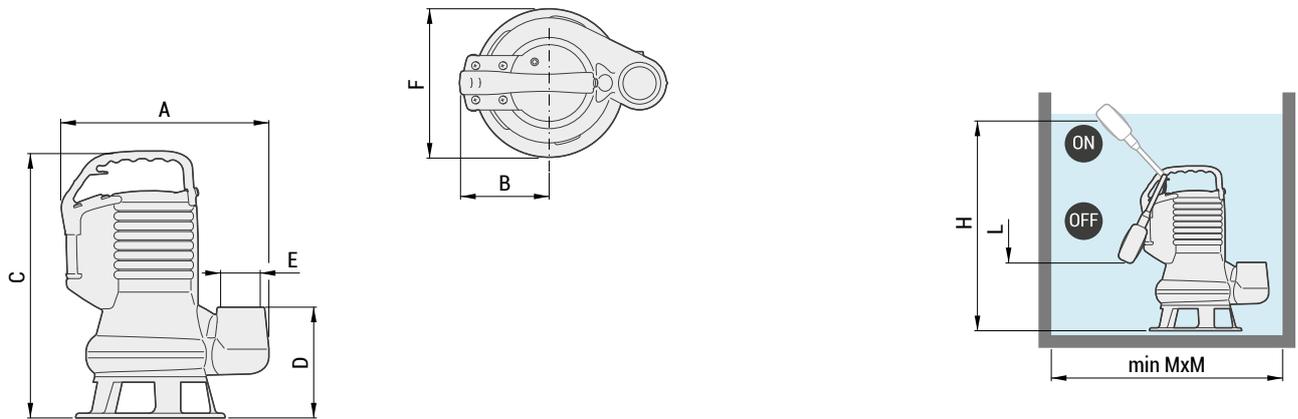


Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage	
①	DG blue 40/2/G40V A1BM5	230	1	-	0.30	2.3	2900	G 1½"	40 mm
②	DG blue 50/2/G40V A1BM5	230	1	-	0.37	2.8	2900	G 1½"	40 mm
③	DG blue 75/2/G40V A1BM5	230	1	-	0.55	4.1	2900	G 1½"	40 mm
④	DG blue 100/2/G40V A1BM5	230	1	-	0.74	5.6	2900	G 1½"	40 mm

DG blue

Dimensions



	Overall dimensions (mm)										kg				Pieces per pallet	
	A	B	C	D	E	F	H	L	M	X		Y	Z	1000x1200 mm		
DG blue 40/2/G40V A1BM5	265	115	335	140	GAS 1½"	190	420	210	300	12.5	200	240	400	75 (25x3)	50 (25x2)	
DG blue 50/2/G40V A1BM5	265	115	335	140	GAS 1½"	190	420	210	300	13	200	240	400	75 (25x3)	50 (25x2)	
DG blue 75/2/G40V A1BM5	265	115	365	140	GAS 1½"	190	450	240	300	15	200	240	400	75 (25x3)	50 (25x2)	
DG blue 100/2/G40V A1BM5	265	115	365	140	GAS 1½"	190	450	240	300	15.5	200	240	400	75 (25x3)	50 (25x2)	

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

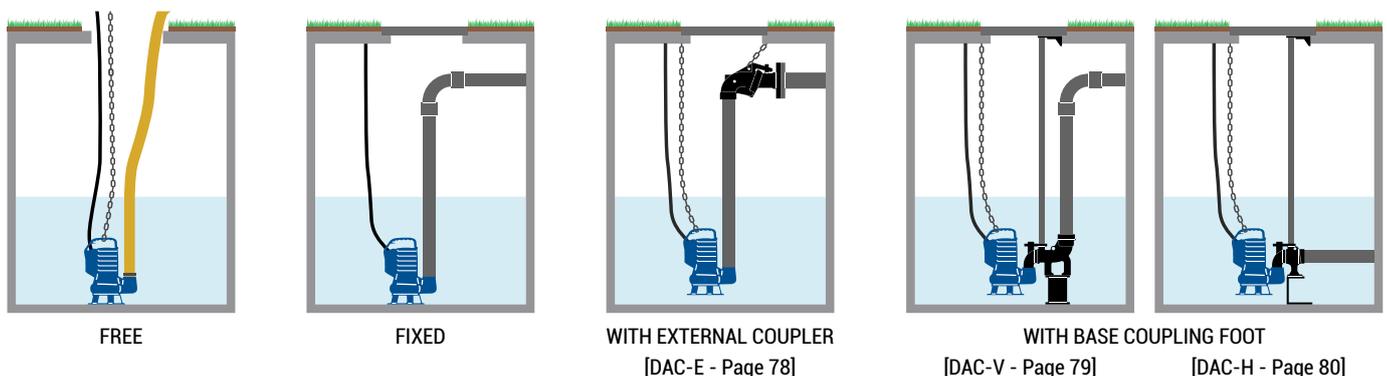
- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

Installations

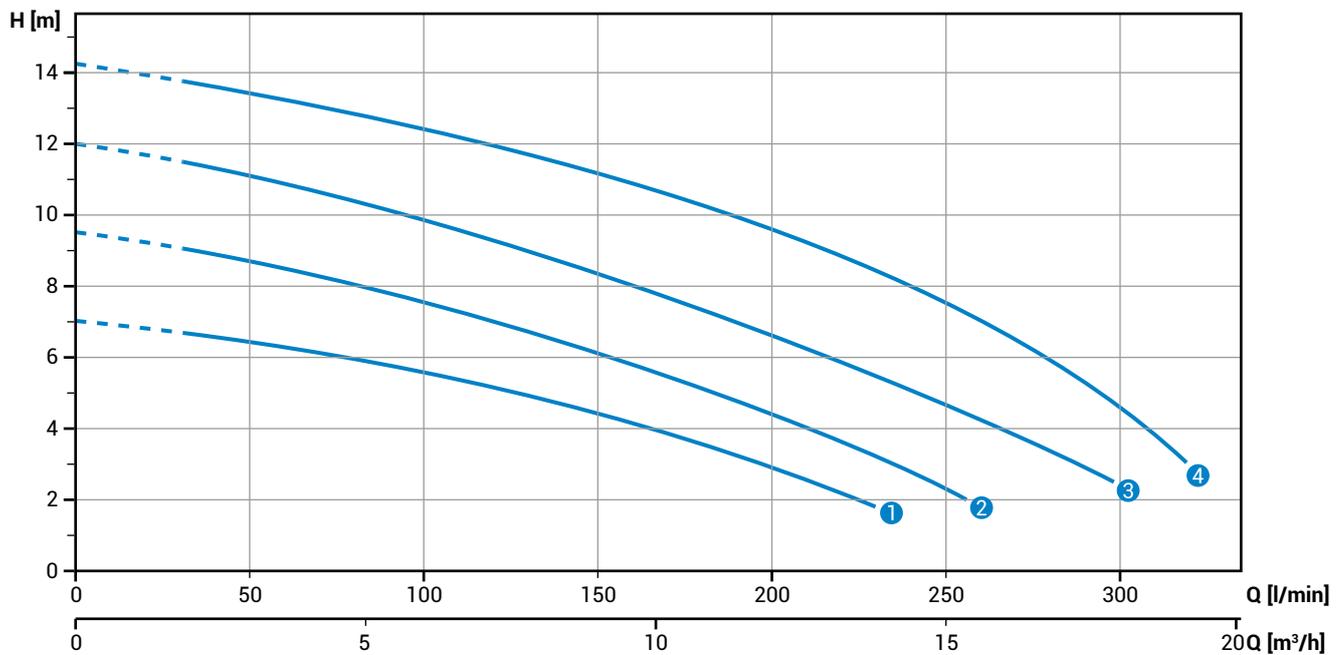


DR blue

Models with vertical threaded discharge [GAS 1 ¼"] - 2 poles

Performances

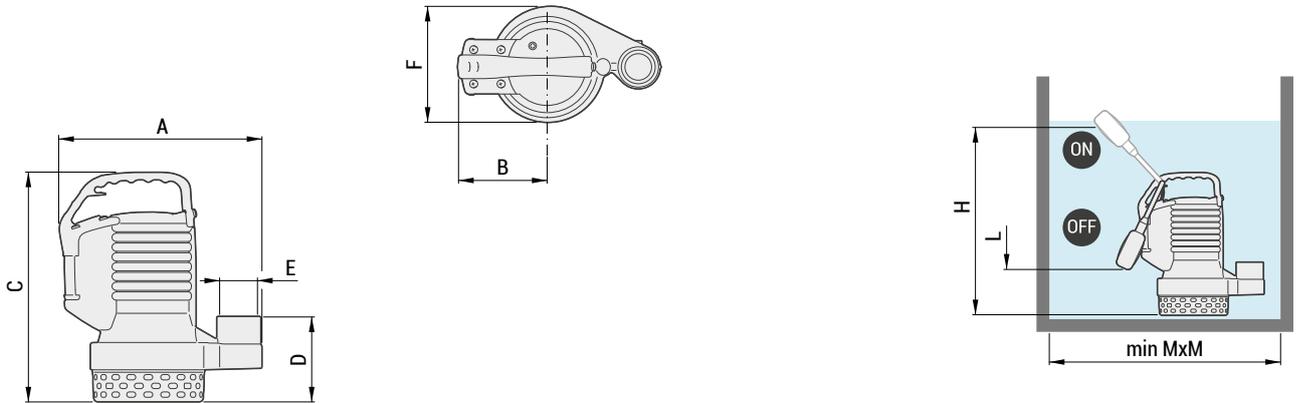
	l/s	0	1	2	3	4	5
	l/min	0	60	120	180	240	300
	m³/h	0	3.6	7.2	10.8	14.4	18.0
① DR blue 40/2/G32V A1BM5		7.0	6.3	5.1	3.6		
② DR blue 50/2/G32V A1BM5		9.5	8.4	7.0	5.1	2.7	
③ DR blue 75/2/G32V A1BM5		12.0	10.8	9.3	7.3	5.0	
④ DR blue 100/2/G32V A1BM5		14.2	13.3	11.9	10.3	8.0	4.5



Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DR blue 40/2/G32V A1BM5	230	1	-	0.30	2.3	2900	G 1 ¼"	7 mm
② DR blue 50/2/G32V A1BM5	230	1	-	0.37	2.8	2900	G 1 ¼"	7 mm
③ DR blue 75/2/G32V A1BM5	230	1	-	0.55	4.1	2900	G 1 ¼"	7 mm
④ DR blue 100/2/G32V A1BM5	230	1	-	0.74	5.6	2900	G 1 ¼"	7 mm

Dimensions



	Overall dimensions (mm)													Pieces per pallet	
	A	B	C	D	E	F	H	L	M	kg	X	Y	Z	1000x1200 mm	
DR blue 40/2/G32V A1BM5	255	115	295	110	GAS 1¼"	150	380	170	300	11.5	200	240	350	75 (25x3)	50 (25x2)
DR blue 50/2/G32V A1BM5	255	115	295	110	GAS 1¼"	150	380	170	300	12	200	240	350	75 (25x3)	50 (25x2)
DR blue 75/2/G32V A1BM5	255	115	325	110	GAS 1¼"	150	410	200	300	13.5	200	240	350	75 (25x3)	50 (25x2)
DR blue 100/2/G32V A1BM5	255	115	325	110	GAS 1¼"	150	410	200	300	15.5	200	240	350	75 (25x3)	50 (25x2)

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

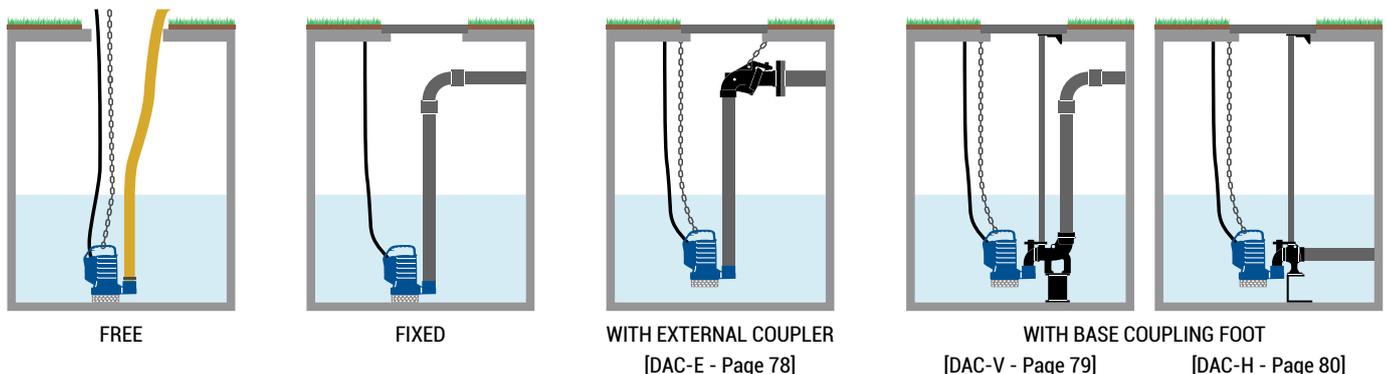
- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

Installations





bluePRO Series

The **bluePRO Series** is intended for use in applications requiring high performance or prolonged, heavy-duty operation in domestic and residential contexts.

Versions are available with four different hydraulics: DRENO (**DR bluePRO**), with multi-channel open impeller for clear or slightly soiled wastewaters; DRAGA (**DG bluePRO**), with vortex impeller and large free passage for wastewaters with heavy soil; GRINDER (**GR bluePRO**), with grinding system; and HIGH HEAD (**AP bluePRO**), with multi-channel open impeller and high head.

They are designed to provide optimal service with **blueBOX** lifting stations.

Models with vertical discharge have a breather allowing them to be primed without touching the

system even after the tank has been completely emptied.

All components are designed to deliver outstanding reliability and ensure quick, easy maintenance.

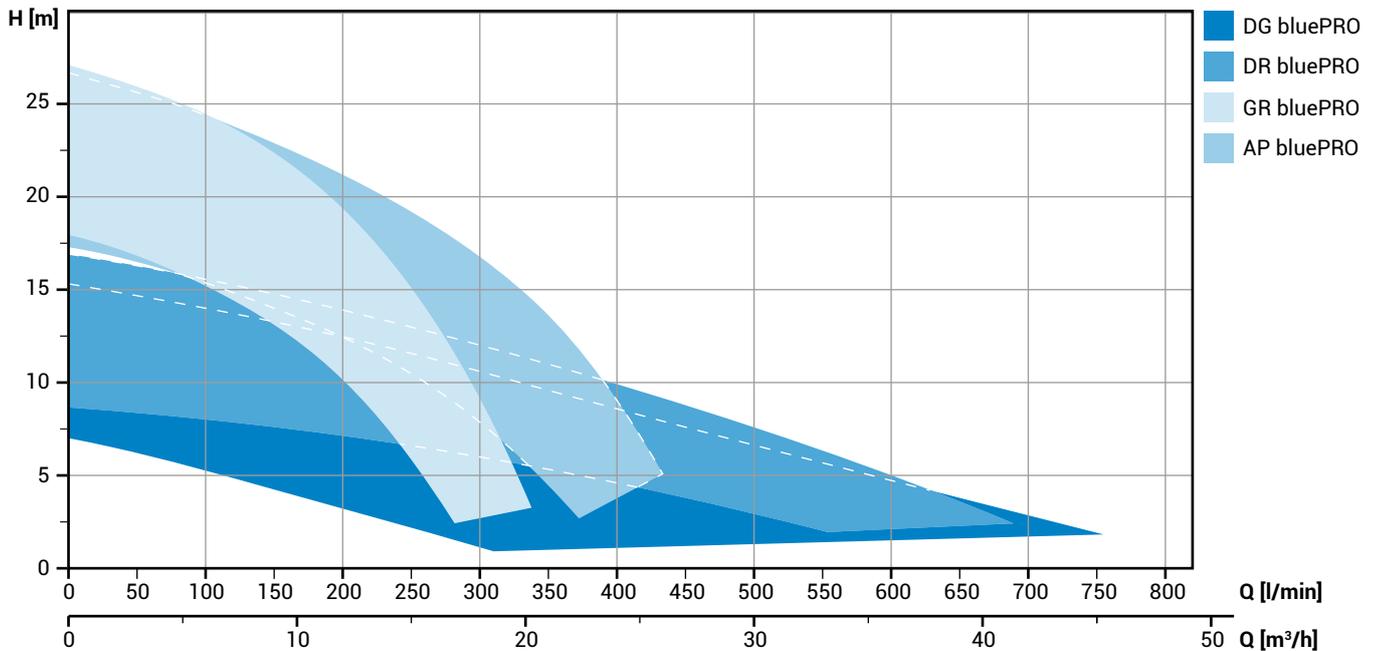
Every model undergoes pressurised testing to guarantee perfect assembly and operation of the gaskets, cable gland and mechanical seals.

The cast iron structure and double mechanical seal in oil chamber make these models rugged and reliable and suitable for even heavy-duty applications lifting strained or soiled wastewater containing solids or filaments, in domestic and residential installations or small civil plants.

Models available in IECEx certified version

Ex ec nC h IIC T3 Gc (~1)
Ex ec h IIC T3 Gc (~3)

Operating ranges



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
Shaft	Stainless steel - AISI 431
Paint type	Ecological bicomponent epoxy (medium thickness 120 µm)

Operating specifications

Max operating temperature	40°C [90°C max 3 min]
pH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm²/s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm³
Maximum acoustic pressure	<70 dB
Max starts per hour	30

The data provided are not binding.
Zenit reserves the right to modify the product without advance notification.



DG *bluePRO*



DG [DRAGA]

- Cast iron vortex impeller
 - Full free passage
-
- Sewage
 - Soiled wastewaters with solids
 - Lifting stations in civil and residential plants

Range characteristics

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.37 ÷ 1.5 kW
Poles	2
Discharge vertical	G 1 ½" - G 2"
horizontal	-
Free passage	max 50 mm
Max flow rate	756 l/min
Max head	15.3 m



DR *bluePRO*



DR [DRENO]

- Cast iron multi-channel open impeller
 - Suction strainer
-
- Clear or slightly soiled wastewaters
 - Strained, seepage and underground pump-out waters
 - Irrigation and installations requiring high hydraulic performances

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.37 ÷ 1.5 kW
Poles	2
Discharge vertical	G 1 ½" - G 2"
horizontal	-
Free passage	max 15 mm
Max flow rate	690 l/min
Max head	17.0 m



GR *bluePRO*



GR [GRINDER]

- Cast iron multi-channel open impeller
 - Grinding system with three-blade rotary knife
-
- Soiled waters containing fibres and filaments
 - Unstrained civil wastewaters
 - Lifting stations in civil and residential plants

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.74 ÷ 1.5 kW
Poles	2
Discharge vertical	-
horizontal	G 1 ½" - DN32
Free passage	-
Max flow rate	336 l/min
Max head	27.0 m



AP *bluePRO*



AP [Alta Prevalenza]

- Cast iron multi-channel open impeller
 - High manometric head
-
- Mainly clean liquids, or liquids with small solids or sand
 - Slightly sandy seepage waters
 - Ideal for construction of fountains and water features

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.74 ÷ 1.5 kW
Poles	2
Discharge vertical	-
horizontal	G 1 ½" - DN32
Free passage	max 6 mm
Max flow rate	426 l/min
Max head	26.6 m

bluePRO Series [GRINDER]

GR bluePRO models incorporate a grinding system comprising a revolving three-bladed knife rigidly mounted on the drive shaft and a steel plate with holes with sharp edges.

This system, capable of speeds of up to 69,000 cuts per minute, finely chops filaments and expels them along the discharge pipeline with no risk of impeller jamming, also keeping the pipeline clean.

Cast iron construction guarantees low vibration and excellent reliability.

In single-phase version, the pump comes in an outer

case containing a circuit breaker to ensure a high startup torque and effective cutting even during restarts.

It also contains an overload protection device which not only provides integral thermal protection for the stator but also offers additional safeguards for the motor when handling heavily soiled liquids.

Applications

Used for the lifting and transfer of heavily soiled wastewaters, sewage and civil and industrial wastewaters, even on narrow pipelines.

Suitable for pumping liquids containing even long filaments and fibres and large-sized destructible solid bodies.

Suitable for applications requiring high pressure levels.

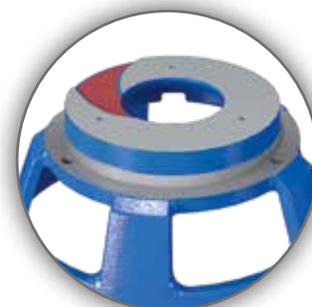


CHOPPER KNIFE [GR bluePRO]

Rugged three-bladed chromium steel chopper knife specially treated for added hardness and reliability when cutting solid bodies.

ANTI-CLOGGING SYSTEM [GR bluePRO]

The special design of the hydraulic part aids the expulsion of suspended solids and prevents fouling of the impeller.



bluePRO Series



HANDLE

Ergonomic handle styled for optimal grip. Shaped to take a shackle to hold the pump steady during handling.

ADJUSTABLE FLOAT SWITCH

Float switch stroke adjustment system for modification of start-stop levels.



CABLE GLAND

Innovative cable gland system with cable holder system and twin O-rings to ensure maximum tightness. Simpler extraction for maintenance.

CAPACITOR

Single-phase models have internal capacitor.



CASE

EN-GJL-250 cast iron construction guarantees solidity and durability even in case of maintenance requiring removal and replacement of the motor.



STRAINER [DR bluePRO]

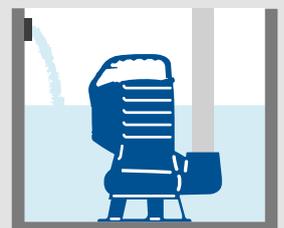
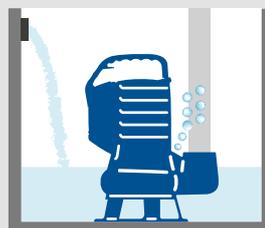
Stainless steel suction strainer and diffuser plate (models 50, 75 and 100).
Techno-polymer suction strainer with cast iron diffuser plate and foot (models 150 and 200).

Highlight



BREATHER [DG bluePRO] [DR bluePRO]

Breather for venting the air accumulated inside the pump after the pit empties, ensuring reliable pump priming even after long periods out of use.



bluePRO Series



PRESSURISED TESTING

Stud bolt for closing the motor compartment for the pressurised testing every model undergoes.

DATAPLATE

Laser-engraved stainless steel dataplate, perfectly legible even after long periods underwater. Slotted in place for easy removal.



MECHANICAL SEALS

Two silicon carbide (2SiC) mechanical seals in oil chamber.



V-RING

The V-Ring in direct contact with the liquid protects the mechanical seals from foreign bodies to keep them in good working condition.

OIL CHAMBER

Guarantees longer mechanical seal lifetime and is easily accessible to simplify maintenance procedures.



FREE PASSAGE [DG bluePRO]

Full free passage allowing the expulsion of solids up to 50 mm and preventing fouling of the impeller.

ANTI-CLOGGING SYSTEM [DR bluePRO]

Stainless steel diffuser plate. Ensures the expulsion of small suspended solids and prevents fouling of the impeller.

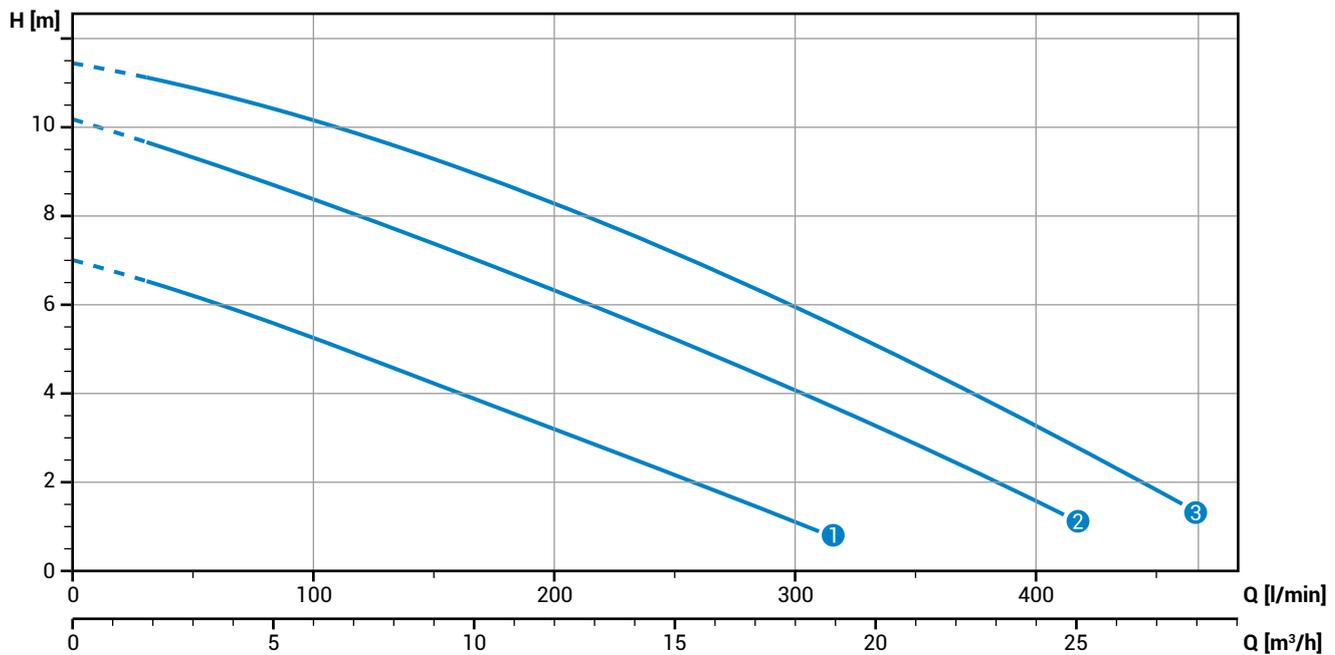


DG bluePRO

Models with vertical threaded discharge [GAS 1½"] - 2 poles

Performances

	l/s	0	1	2	3	4	5	6	7
	l/min	0	60	120	180	240	300	360	420
	m³/h	0	3.6	7.2	10.8	14.4	18.0	21.6	25.2
①	DG bluePRO 50/2/G40V A1BM[T]5		6.0	4.9	3.6	2.4	1.1		
②	DG bluePRO 75/2/G40V A1BM[T]5		9.1	8.0	6.8	5.5	4.1	2.6	
③	DG bluePRO 100/2/G40V A1BM[T]5		10.7	9.8	8.7	7.4	5.9	4.4	2.7



Technical data

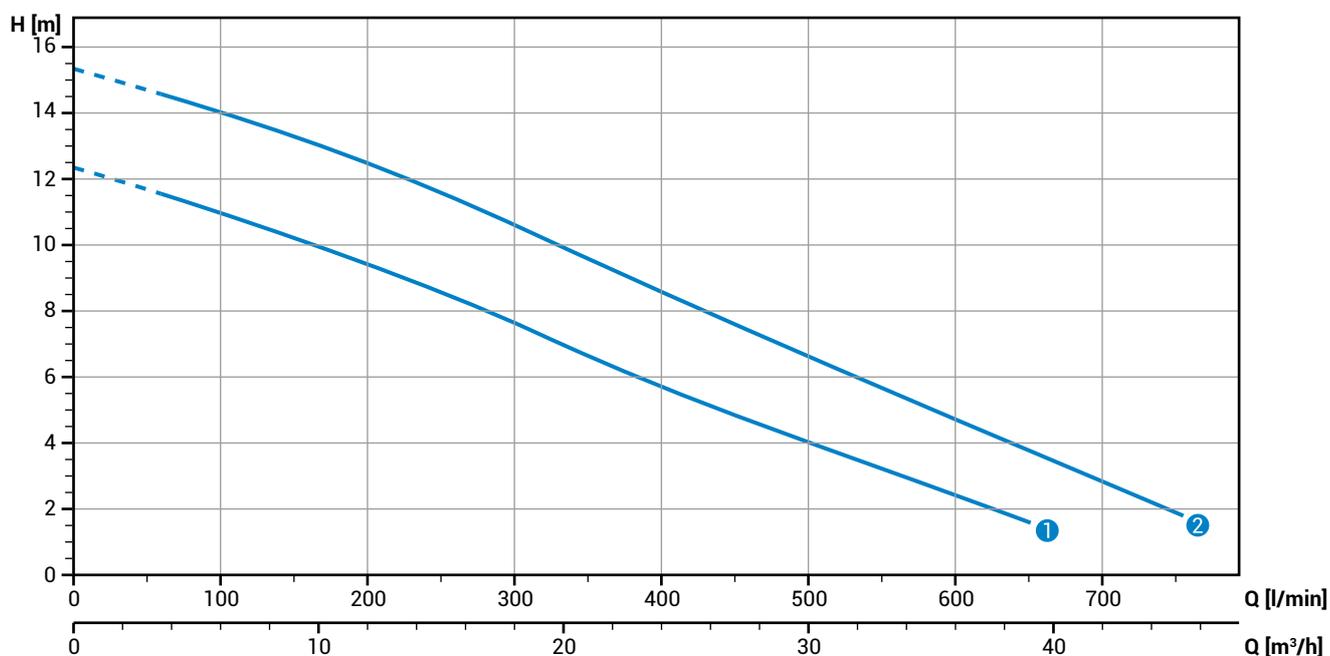
	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage	
①	DG bluePRO 50/2/G40V A1BM5	230	1	-	0.37	2.8	2900	G 1½"	40 mm
②	DG bluePRO 75/2/G40V A1BM5	230	1	-	0.55	4.1	2900	G 1½"	40 mm
③	DG bluePRO 100/2/G40V A1BM5	230	1	-	0.74	5.6	2900	G 1½"	40 mm
①	DG bluePRO 50/2/G40V A1BT5	400	3	-	0.37	1.15	2900	G 1½"	40 mm
②	DG bluePRO 75/2/G40V A1BT5	400	3	-	0.55	1.6	2900	G 1½"	40 mm
③	DG bluePRO 100/2/G40V A1BT5	400	3	-	0.74	2.15	2900	G 1½"	40 mm

DG *bluePRO*

Models with vertical threaded discharge [GAS 2"] - 2 poles

Performances

	l/s	0	2	4	6	8	10	12
	l/min	0	120	240	360	480	600	720
	m ³ /h	0	7.2	14.4	21.6	28.8	36.0	43.2
①	DG bluePRO 150/2/G50V A1CM[T]5		10.7	8.8	6.5	4.4	2.4	
②	DG bluePRO 200/2/G50V A1CM[T]5		13.7	11.7	9.4	7.1	4.7	2.5

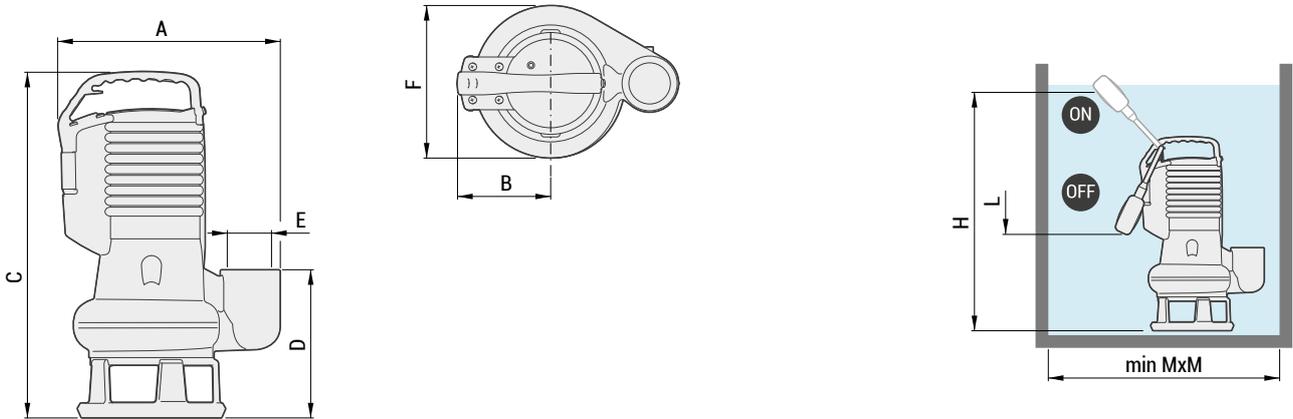


Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage	
①	DG bluePRO 150/2/G50V A1CM5	230	1	-	1.1	7.5	2900	G 2"	50 mm
②	DG bluePRO 200/2/G50V A1CM5	230	1	-	1.5	10.0	2900	G 2"	50 mm
①	DG bluePRO 150/2/G50V A1CT5	400	3	-	1.1	3.2	2900	G 2"	50 mm
②	DG bluePRO 200/2/G50V A1CT5	400	3	-	1.5	4.3	2900	G 2"	50 mm

DG bluePRO

Dimensions



	Overall dimensions (mm)													Pieces per pallet	
	A	B	C	D	E	F	H	L	M	kg	X	Y	Z	1000x1200 mm	
DG bluePRO 50/2/G40V A1BM[T]5	265	115	335	140	GAS 1½"	190	420	210	300	13	200	240	400	75 (25x3)	50 (25x2)
DG bluePRO 75/2/G40V A1BM[T]5	265	115	365	140	GAS 1½"	190	450	240	300	15	200	240	400	75 (25x3)	50 (25x2)
DG bluePRO 100/2/G40V A1BM[T]5	265	115	365	140	GAS 1½"	190	450	240	300	15.5	200	240	400	75 (25x3)	50 (25x2)
DG bluePRO 150/2/G50V A1CM[T]5	295	125	465	195	GAS 2"	200	525	335	400	23	250	300	480	32 (16x2)	
DG bluePRO 200/2/G50V A1CM[T]5	295	125	465	195	GAS 2"	200	525	335	400	24	250	300	480	32 (16x2)	

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Three-phase models

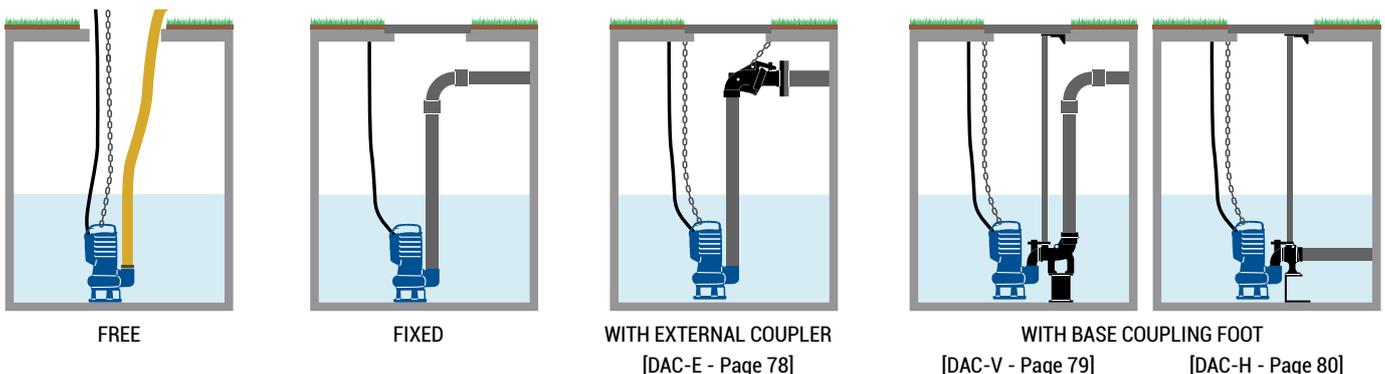
- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

Installations

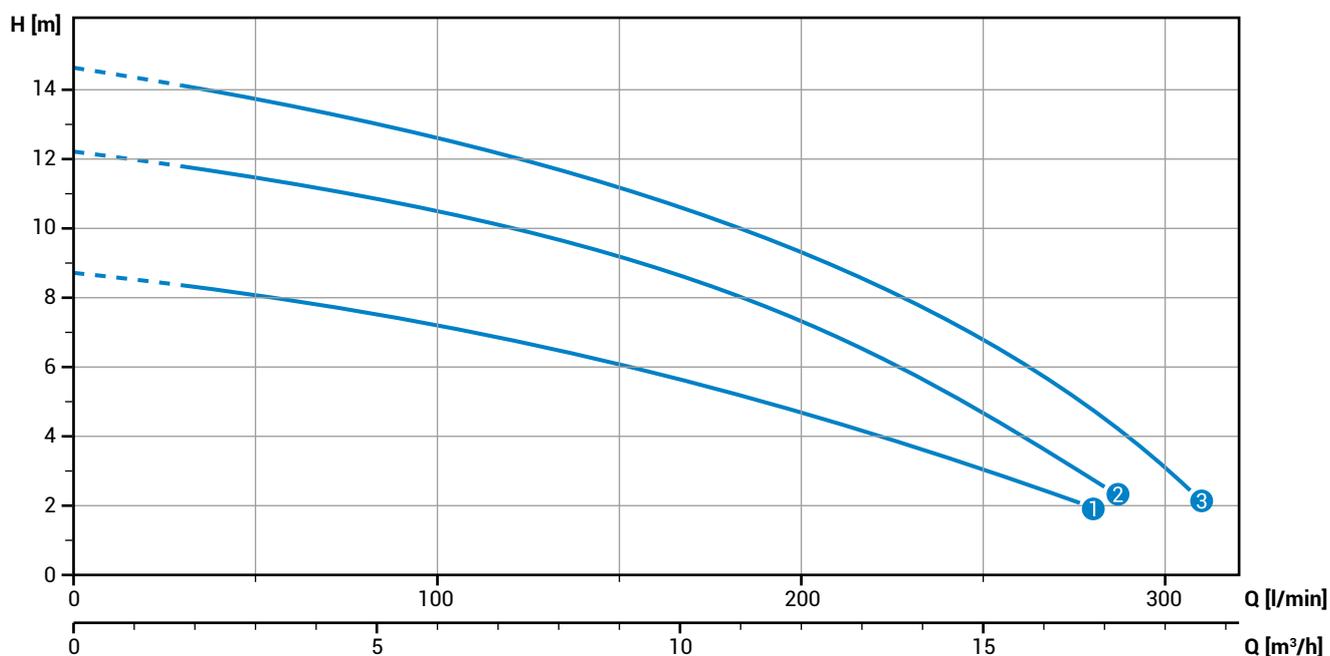


DR *bluePRO*

Models with vertical threaded discharge [GAS 1 ¼"] - 2 poles

Performances

	l/s	0	1	2	3	4	5
	l/min	0	60	120	180	240	300
	m³/h	0	3.6	7.2	10.8	14.4	18.0
① DR bluePRO 50/2/G32V A1BM[T]5			7.9	6.8	5.3	3.4	
② DR bluePRO 75/2/G32V A1BM[T]5			11.3	10.0	8.2	5.3	
③ DR bluePRO 100/2/G32V A1BM[T]5			13.5	12.1	10.1	7.4	3.1



Technical data

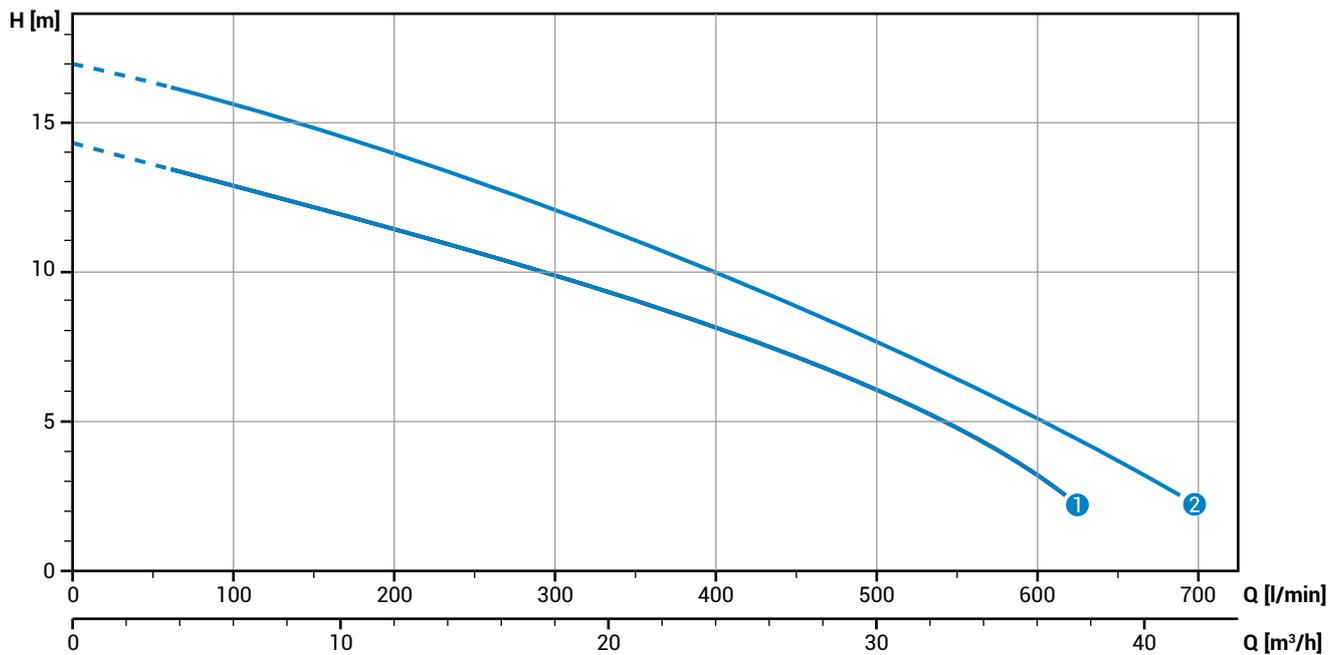
	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DR bluePRO 50/2/G32V A1BM5	230	1	-	0.37	2.8	2900	G 1 ¼"	15 mm
② DR bluePRO 75/2/G32V A1BM5	230	1	-	0.55	4.1	2900	G 1 ¼"	15 mm
③ DR bluePRO 100/2/G32V A1BM5	230	1	-	0.74	5.6	2900	G 1 ¼"	15 mm
① DR bluePRO 50/2/G32V A1BT5	400	3	-	0.37	1.15	2900	G 1 ¼"	15 mm
② DR bluePRO 75/2/G32V A1BT5	400	3	-	0.55	1.6	2900	G 1 ¼"	15 mm
③ DR bluePRO 100/2/G32V A1BT5	400	3	-	0.74	2.15	2900	G 1 ¼"	15 mm

DR *bluePRO*

Models with vertical threaded discharge [GAS 2"] - 2 poles

Performances

	l/s	0	2	4	6	8	10
	l/min	0	120	240	360	480	600
	m ³ /h	0	7.2	14.4	21.6	28.8	36.0
①	DR bluePRO 150/2/G50V A1CM[T]5		12.6	10.9	8.9	6.5	3.1
②	DR bluePRO 200/2/G50V A1CM[T]5		15.3	13.3	10.9	8.1	5.1

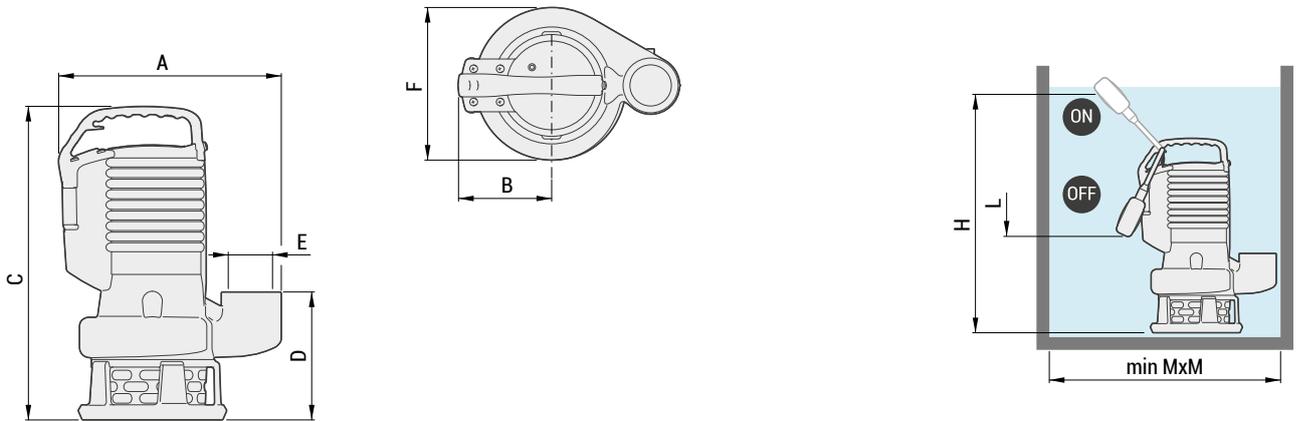


Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage	
①	DR bluePRO 150/2/G50V A1CM5	230	1	-	1.1	7.5	2900	G 2"	10x30 mm
②	DR bluePRO 200/2/G50V A1CM5	230	1	-	1.5	10	2900	G 2"	10x30 mm
①	DR bluePRO 150/2/G50V A1CT5	400	3	-	1.1	3.2	2900	G 2"	10x30 mm
②	DR bluePRO 200/2/G50V A1CT5	400	3	-	1.5	4.3	2900	G 2"	10x30 mm

DR bluePRO

Dimensions



Overall dimensions (mm)

	Overall dimensions (mm)										kg				Pieces per pallet	
	A	B	C	D	E	F	H	L	M	X		Y	Z	1000x1200 mm		
DR bluePRO 50/2/G32V A1BM[T]5	255	115	290	110	GAS 1 1/4"	150	380	170	300	12	200	240	350	75 (25x3)	50 (25x2)	
DR bluePRO 75/2/G32V A1BM[T]5	255	115	320	110	GAS 1 1/4"	150	410	200	300	13.5	200	240	350	75 (25x3)	50 (25x2)	
DR bluePRO 100/2/G32V A1BM[T]5	255	115	320	110	GAS 1 1/4"	150	410	200	300	14	200	240	350	75 (25x3)	50 (25x2)	
DR bluePRO 150/2/G50V A1CM[T]5	295	125	420	170	GAS 2"	200	480	290	400	23	250	300	480	32 (16x2)		
DR bluePRO 200/2/G50V A1CM[T]5	295	125	420	170	GAS 2"	200	480	290	400	24	250	300	480	32 (16x2)		

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Three-phase models

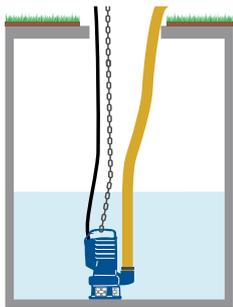
- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Packaging

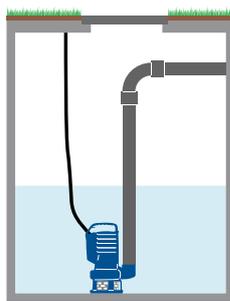


The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

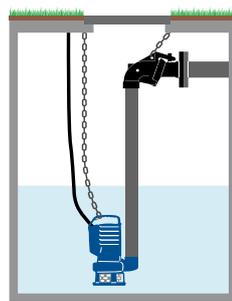
Installations



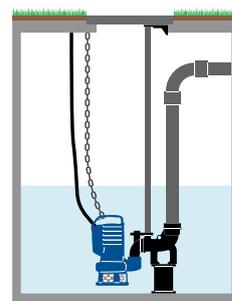
FREE



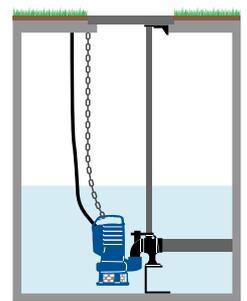
FIXED



WITH EXTERNAL COUPLER
[DAC-E - Page 78]



WITH BASE COUPLING FOOT
[DAC-V - Page 79]



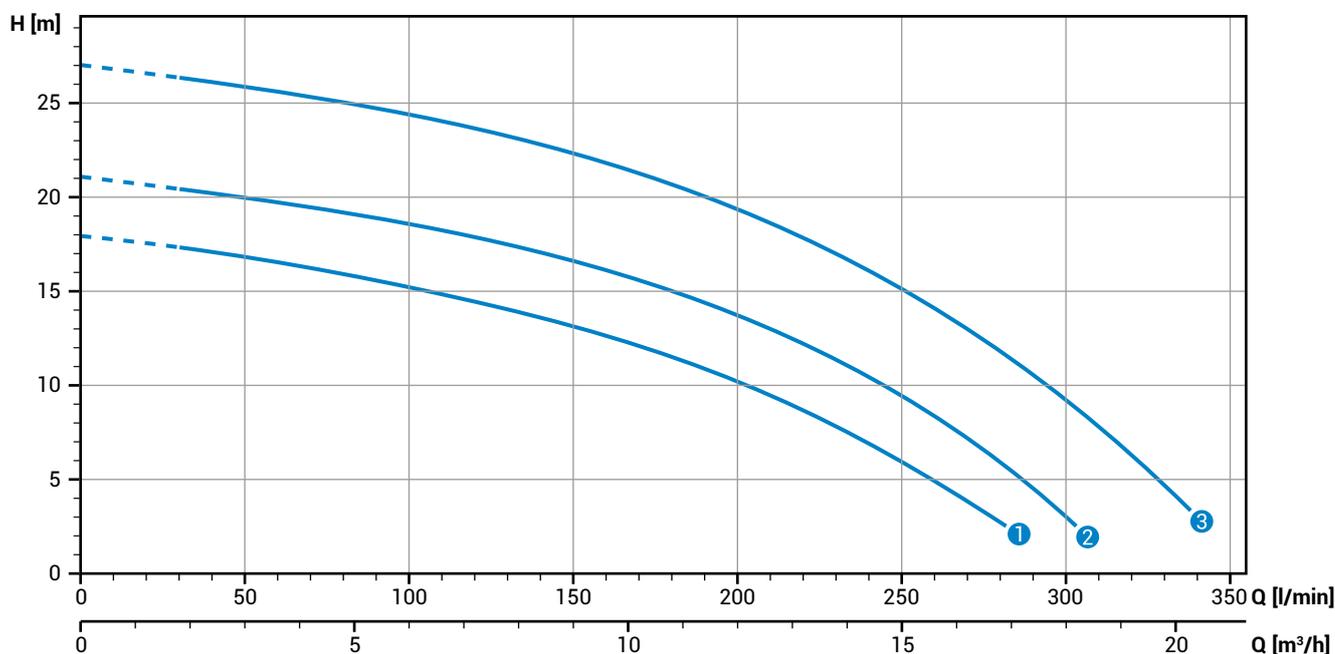
WITH BASE COUPLING FOOT
[DAC-H - Page 80]

GR *bluePRO*

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

Performances

	l/s	0	1	2	3	4	5
	l/min	0	60	120	180	240	300
	m³/h	0	3.6	7.2	10.8	14.4	18.0
①	GR bluePRO 100/2/G40H A1CM[T]5		16.4	14.4	11.5	6.9	
②	GR bluePRO 150/2/G40H A1CM[T]5		19.6	17.9	15.1	10.4	3.0
③	GR bluePRO 200/2/G40H A1CM[T]5		25.6	23.6	20.7	16.1	9.3

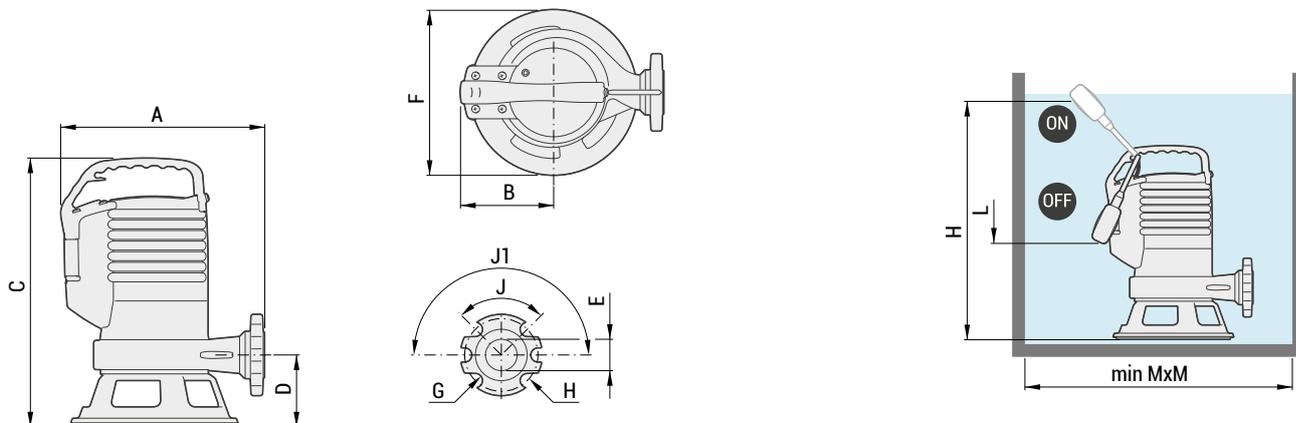


Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Start	Ø	Free passage	
①	GR bluePRO 100/2/G40H A1CM5	230	1	-	0.74	5.5	2900	Dir	G 1½"- DN32 PN6	-
②	GR bluePRO 150/2/G40H A1CM5	230	1	-	1.10	7.5	2900	Dir	G 1½"- DN32 PN6	-
③	GR bluePRO 200/2/G40H A1CM5	230	1	-	1.50	10	2900	Dir	G 1½"- DN32 PN6	-
①	GR bluePRO 100/2/G40H A1CT5	400	3	-	0.74	2.7	2900	Dir	G 1½"- DN32 PN6	-
②	GR bluePRO 150/2/G40H A1CT5	400	3	-	1.10	3.2	2900	Dir	G 1½"- DN32 PN6	-
③	GR bluePRO 200/2/G40H A1CT5	400	3	-	1.50	4.3	2900	Dir	G 1½"- DN32 PN6	-

GR bluePRO

Dimensions



Overall dimensions (mm)

	A	B	C	D	E	F	G	H	J	J1	H	L	M	kg	X	Y	Z	Pieces per pallet 1000x1200 mm
GR bluePRO 100/2/G40H A1CM[T]5	270	130	365	95	GAS 1½"	220	14	90	90°	180°	450	240	450	19	250	300	400	48 (16x3) 32 (16x2)
GR bluePRO 150/2/G40H A1CM[T]5	285	125	410	100	GAS 1½"	230	14	90	90°	180°	495	285	450	24	250	300	440	32 (16x2)
GR bluePRO 200/2/G40H A1CM[T]5	285	125	410	100	GAS 1½"	230	14	90	90°	180°	495	285	450	26	250	300	440	32 (16x2)

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

TCDT Thermal protection, capacitor, startup capacitor, overload protection

TCDGT Thermal protection, capacitor, startup capacitor, overload protection, float switch

Three-phase models

TR Thermal protection, relay for motor protection

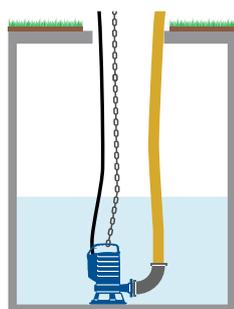
TRG Thermal protection, relay for motor protection, float switch

Packaging

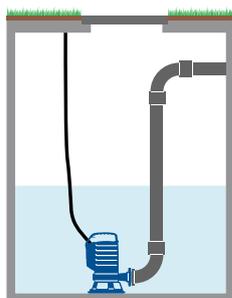


The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

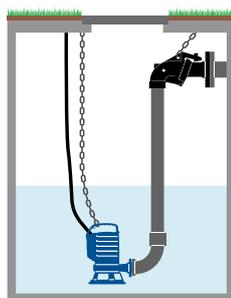
Installations



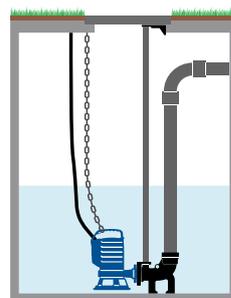
FREE



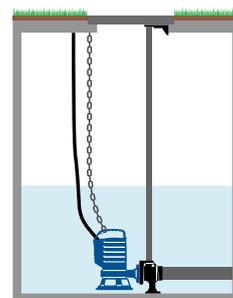
FIXED



WITH EXTERNAL COUPLER
[DAC-E - Page 78]



WITH BASE COUPLING FOOT
[DAC-V - Page 79]



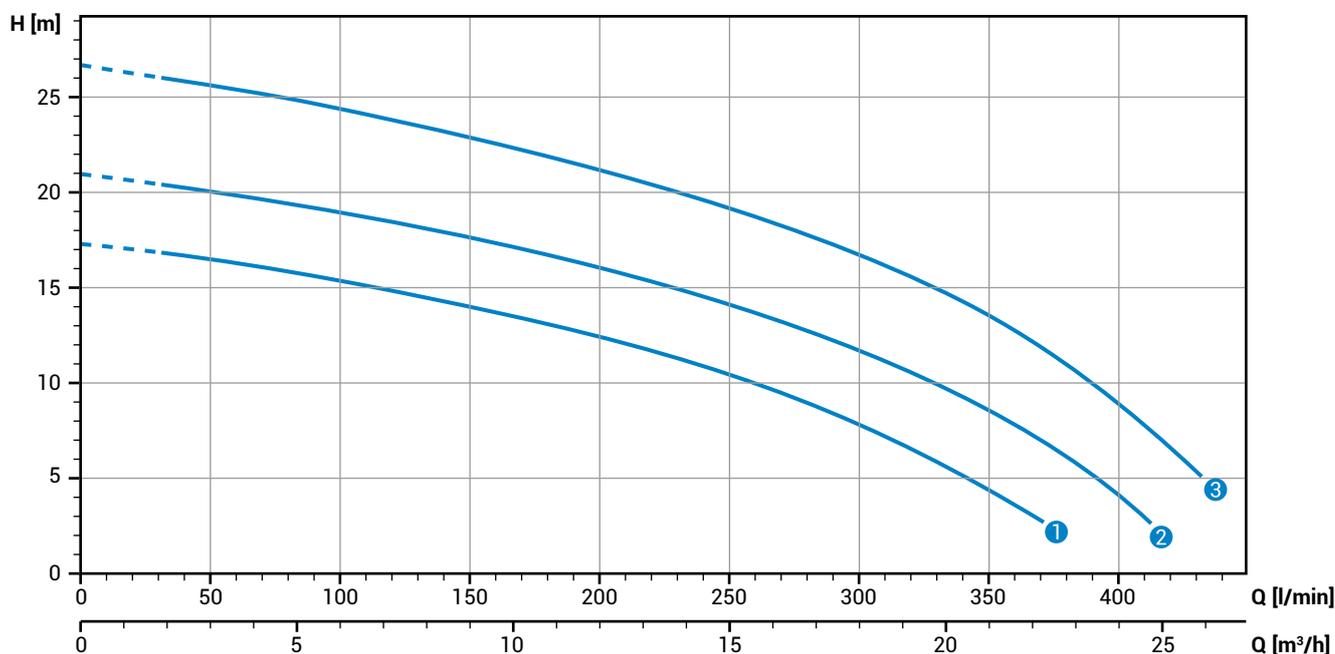
WITH BASE COUPLING FOOT
[DAC-H - Page 80]

AP bluePRO

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

Performances

	l/s	0	1	2	3	4	5	6	7
	l/min	0	60	120	180	240	300	360	420
	m³/h	0	3.6	7.2	10.8	14.4	18.0	21.6	25.2
①	AP bluePRO 100/2/G40H A1CM[T]5		16.3	14.9	13.1	10.9	7.8	3.6	
②	AP bluePRO 150/2/G40H A1CM[T]5		19.8	18.5	16.7	14.6	11.7	7.8	
③	AP bluePRO 200/2/G40H A1CM[T]5		25.4	23.8	21.9	19.6	16.7	12.7	6.6

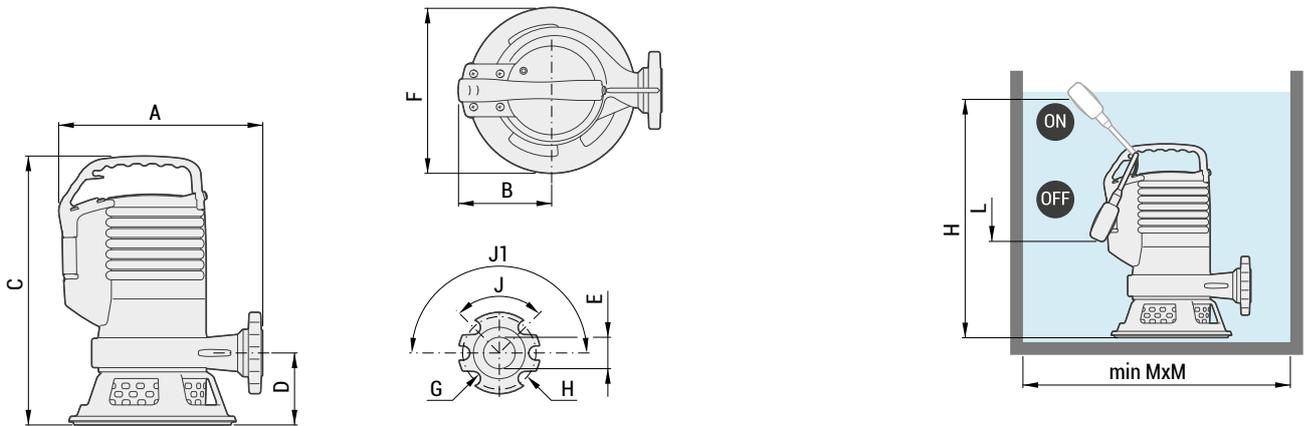


Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Start	Ø	Free passage	
①	AP bluePRO 100/2/G40H A1CM5	230	1	-	0.74	5.5	2900	Dir	G 1½"- DN32 PN6	6 mm
②	AP bluePRO 150/2/G40H A1CM5	230	1	-	1.10	7.5	2900	Dir	G 1½"- DN32 PN6	6 mm
③	AP bluePRO 200/2/G40H A1CM5	230	1	-	1.50	10.0	2900	Dir	G 1½"- DN32 PN6	6 mm
①	AP bluePRO 100/2/G40H A1CT5	400	3	-	0.74	2.7	2900	Dir	G 1½"- DN32 PN6	6 mm
②	AP bluePRO 150/2/G40H A1CT5	400	3	-	1.10	3.2	2900	Dir	G 1½"- DN32 PN6	6 mm
③	AP bluePRO 200/2/G40H A1CT5	400	3	-	1.50	4.3	2900	Dir	G 1½"- DN32 PN6	6 mm

AP bluePRO

Dimensions



Overall dimensions (mm)

	A	B	C	D	E	F	G	H	J	J1	H	L	M	kg	X	Y	Z	Pieces per pallet 1000x1200 mm
AP bluePRO 100/2/G40H A1CM[T]5	270	130	365	95	GAS 1½"	220	14	90	90°	180°	450	240	450	19	250	300	400	48 (16x3) 32 (16x2)
AP bluePRO 150/2/G40H A1CM[T]5	285	125	410	100	GAS 1½"	230	14	90	90°	180°	495	285	450	24	250	300	440	32 (16x2)
AP bluePRO 200/2/G40H A1CM[T]5	285	125	410	100	GAS 1½"	230	14	90	90°	180°	495	285	450	26	250	300	440	32 (16x2)

M - Minimum dimensions. Suggested dimensions 500mm x 500mm

Versions

Single-phase models

- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Three-phase models

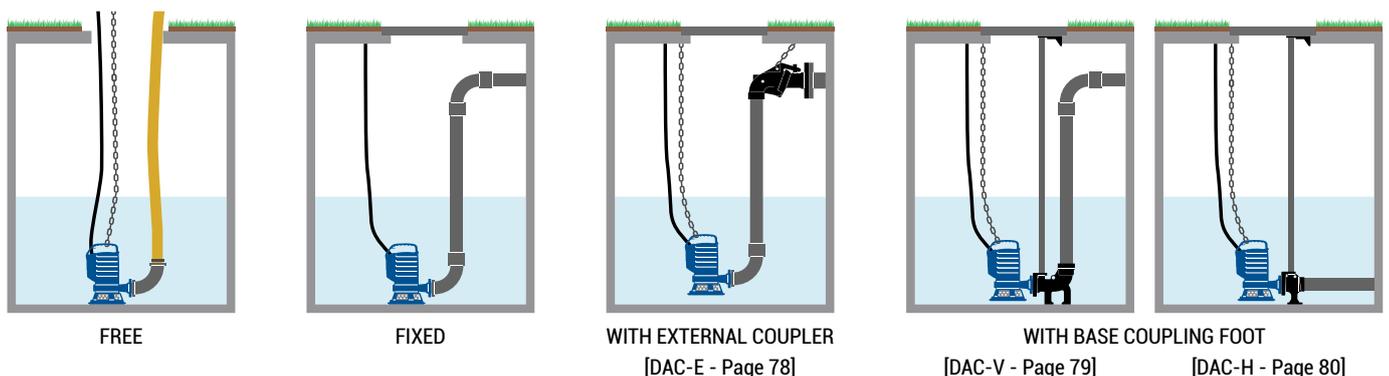
- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Packaging



The rugged cardboard box packaging fulfils two functions: it protects the product in transit, thanks to the thickness of the board used and expanded polyurethane padding, and also provides key information about the pump's use and performance data, printed clearly and legibly in colour. Pumps are supplied complete with all the documentation required by European standards and a copy of the duty dataplate on a silvered decal that can be affixed to the manual to ensure the availability of all the most useful data (serial number, power rating, etc.) at all times.

Installations



FREE

FIXED

WITH EXTERNAL COUPLER
[DAC-E - Page 78]

WITH BASE COUPLING FOOT
[DAC-V - Page 79]

WITH BASE COUPLING FOOT
[DAC-H - Page 80]

E Series

Lightweight, reliable cast iron submersible pumps. Versions are available with two different hydraulics: DRENO (DRE), with multi-channel open impeller for clear or slightly soiled wastewaters; and DRAGA (DGE), with vortex impeller and large free passage for wastewaters with heavy soil.

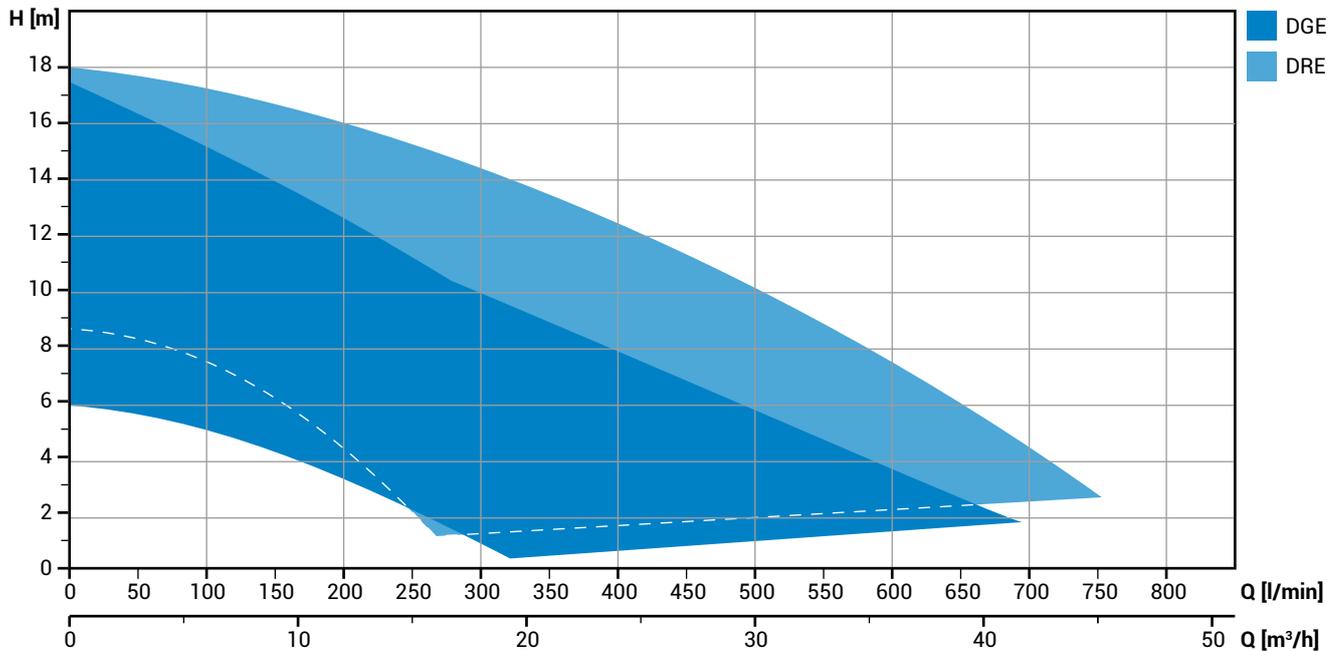
The compact size and horizontal and vertical discharge allow any installation, even in existing plants or small pits.

Every model undergoes pressurised testing to guarantee perfect assembly and operation of the gaskets, cable gland and mechanical seals.

E Series models are suitable mainly for permanent installations yet, thanks to their convenience and ease of handling, they can also be used in emergencies for pumping-out flooding premises or for temporary installations for pumping from wells and tanks.

Intended mainly for domestic use, these pumps are recommended for pressurising small plants, for garden sprinkler systems, for supplying fountains, for emptying swimming-pools or tanks and for pumping out flooded cellars or garages.

Operating ranges



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
Shaft	Stainless steel - AISI 431
Paint type	Ecological bicomponent epoxy (medium thickness 120 µm)

Operating specifications

Max operating temperature	40°C [90°C max 3 min]
pH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm²/s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm³
Maximum acoustic pressure	<70 dB
Max starts per hour	30

The data provided are not binding. Zenit reserves the right to modify the product without advance notification.

DGE



DG [DRAGA]



- Cast iron vortex impeller
- Large free passage

- Sewage
- Soiled wastewaters with solids
- Lifting stations in civil and residential plants

DRE



DR [DRENO]



- Cast iron multi-channel open impeller
- Stainless steel suction strainer

- Clear or slightly soiled wastewaters
- Strained, seepage and underground pump-out waters
- Garden sprinklers and pumping from tanks

Range characteristics

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.37 ÷ 1.5 kW
Poles	2
Discharge	vertical G 1½" - G 2"
	horizontal G 2" - DN50
Free passage	max 50 mm
Max flow rate	696 l/min
Max head	15.7 m

Power supply	220/240V ~1 - 380/400V ~3
Frequency	50 Hz
Power	0.3 ÷ 0.74 kW
Poles	2
Discharge	vertical G 1¼" - G 2"
	horizontal G 2" - DN50
Free passage	max 15 mm
Max flow rate	756 l/min
Max head	18.0 m

E Series



HANDLE

Stainless steel lifting and carrying handle.



CASE

Rugged cast iron construction.



DISCHARGE PORT

Wide range of models with vertical or horizontal discharge, with threaded or flanged connections for absolutely flexible installation.

FEET

The rugged feet integral in the cast iron case give the pump stability and keep it at the correct suction height with no additional accessories required.

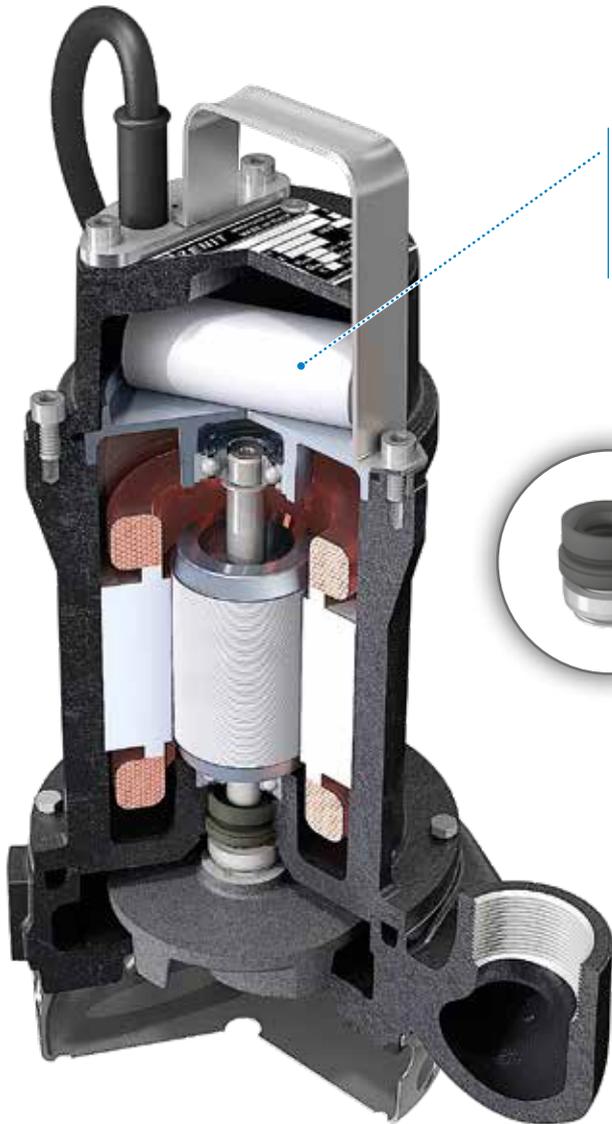
Highlight



STRUCTURE

Pump body dismantles for easy maintenance of internal components.

E Series



CAPACITOR/RELAY

Single-phase models have internal capacitor. Three-phase models are equipped with thermal protection and relay to safeguard the motor (optional).



MECHANICAL SEALS

One mechanical seal in silicon carbide (SiC) and one lip seal.



STRAINER [DRE]

Stainless steel suction strainer.



FREE PASSAGE [DGE]

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

ANTI-CLOGGING SYSTEM [DRE]

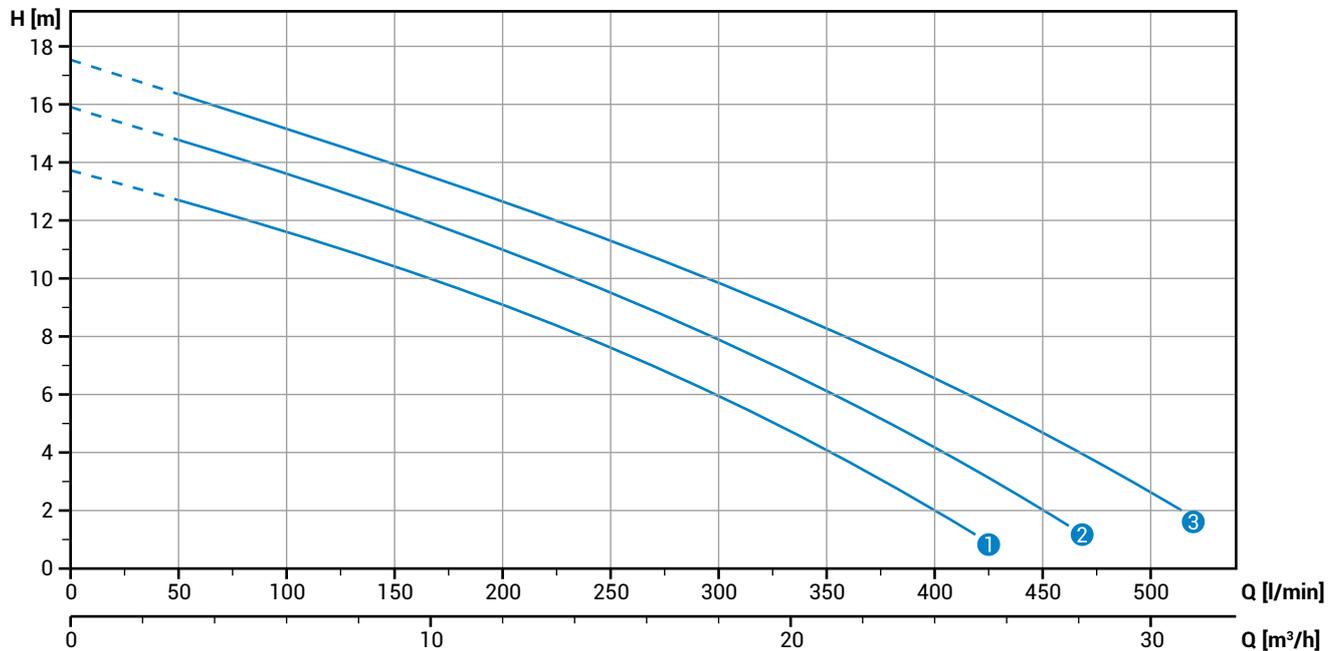
The specially shaped hydraulics ensure the expulsion of small suspended solids and prevent fouling of the impeller.



Models with vertical threaded discharge [GAS 1½"] - 2 poles

Performances

	l/s	0	2	4	6	8
	l/min	0	120	240	360	480
	m³/h	0	7.2	14.4	21.6	28.8
① DGE 100/2/G40V A0CM[T]5			11.1	7.9	3.7	
② DGE 150/2/G40V A0CM[T]5			13.1	9.8	5.7	
③ DGE 200/2/G40V A0CM[T]5			14.7	11.6	7.9	3.5



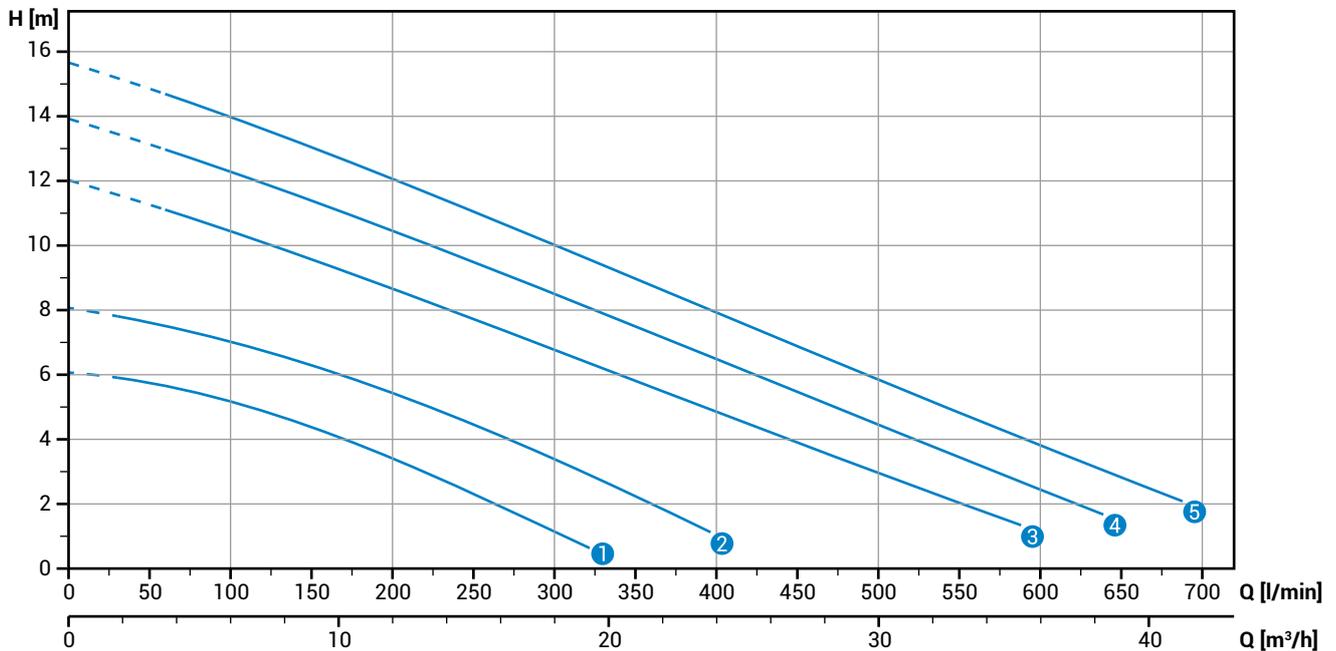
Technical data

	V	Phases	P1 [kw]	P2 [kw]	A	Rpm	Ø	Free passage
① DGE 100/2/G40V A0CM5	230	1	-	0.88	6.0	2900	G 1½"	40 mm
② DGE 150/2/G40V A0CM5	230	1	-	1.10	7.6	2900	G 1½"	40 mm
③ DGE 200/2/G40V A0CM5	230	1	-	1.50	8.9	2900	G 1½"	40 mm
① DGE 100/2/G40V A0CT5	400	3	-	0.88	2.0	2900	G 1½"	40 mm
② DGE 150/2/G40V A0CT5	400	3	-	1.10	2.5	2900	G 1½"	40 mm
③ DGE 200/2/G40V A0CT5	400	3	-	1.50	3.2	2900	G 1½"	40 mm

Models with vertical threaded discharge [GAS 2"] - 2 poles

Performances

	l/s	0	2	4	6	8	10
	l/min	0	120	240	360	480	600
	m³/h	0	7.2	14.4	21.6	28.8	36.0
① DGE 50/2/G50V B0BM[T]5			4.9	2.6			
② DGE 75/2/G50V B0BM[T]5			6.7	4.7	2.0		
③ DGE 100/2/G50V B0CM[T]5			10.1	7.9	5.6	3.4	
④ DGE 150/2/G50V B0CM[T]5			11.9	9.6	7.2	4.8	2.4
⑤ DGE 200/2/G50V B0CM[T]5			13.6	11.2	8.8	6.3	3.9



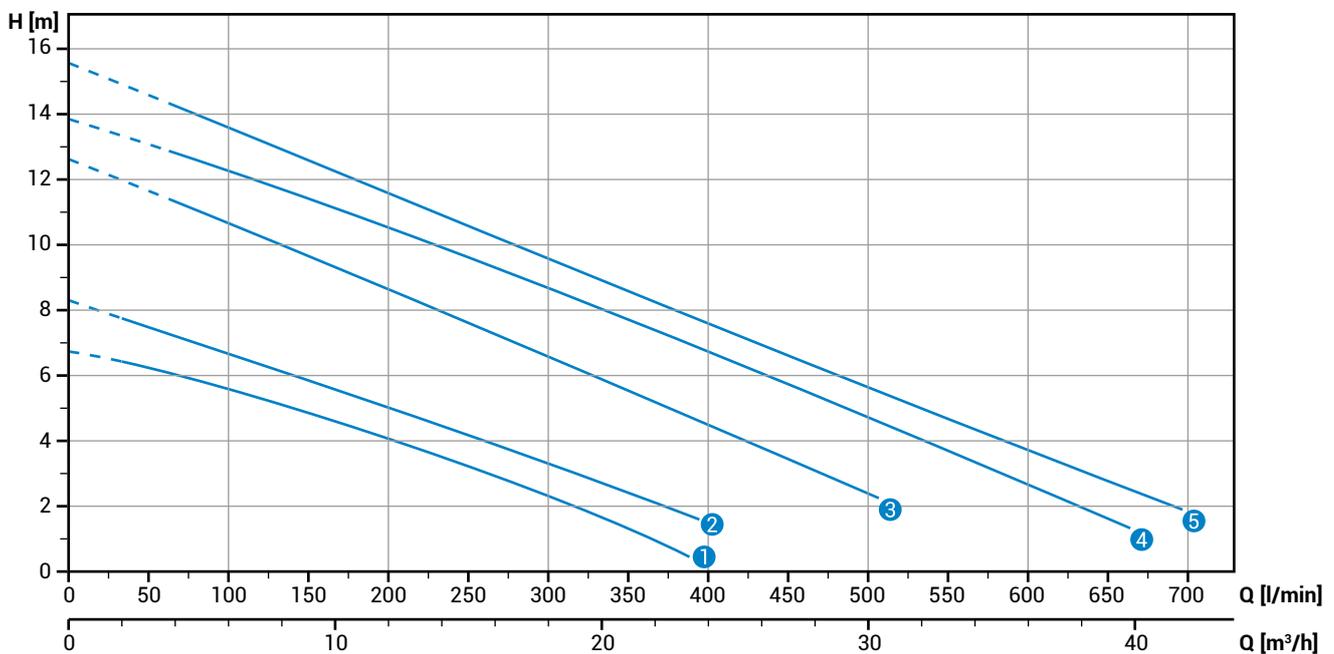
Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DGE 50/2/G50V B0BM5	230	1	-	0.37	2.8	2900	G 2"	40 mm
② DGE 75/2/G50V B0BM5	230	1	-	0.55	3.6	2900	G 2"	40 mm
③ DGE 100/2/G50V B0CM5	230	1	-	0.88	6.5	2900	G 2"	50 mm
④ DGE 150/2/G50V B0CM5	230	1	-	1.10	8.2	2900	G 2"	50 mm
⑤ DGE 200/2/G50V B0CM5	230	1	-	1.50	9.4	2900	G 2"	50 mm
① DGE 50/2/G50V B0BT5	400	3	-	0.37	1.1	2900	G 2"	40 mm
② DGE 75/2/G50V B0BT5	400	3	-	0.55	1.3	2900	G 2"	40 mm
③ DGE 100/2/G50V B0CT5	400	3	-	0.88	2.2	2900	G 2"	50 mm
④ DGE 150/2/G50V B0CT5	400	3	-	1.10	2.6	2900	G 2"	50 mm
⑤ DGE 200/2/G50V B0CT5	400	3	-	1.50	3.6	2900	G 2"	50 mm

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

Performances

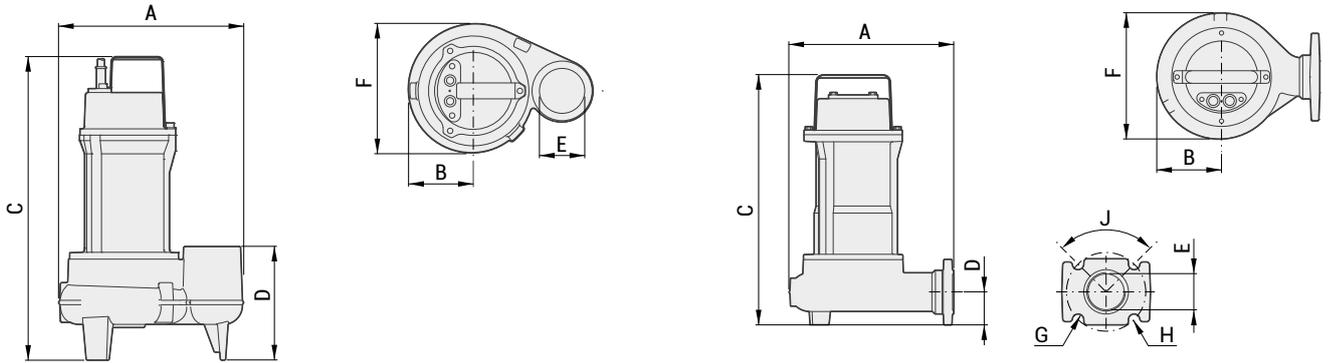
	l/s	0	2	4	6	8	10
	l/min	0	120	240	360	480	600
	m ³ /h	0	7.2	14.4	21.6	28.8	36.0
① DGE 50/2/G50H A1BM[T]5			5.3	3.4	1.0		
② DGE 75/2/G50H A1BM[T]5			6.3	4.3	2.2		
③ DGE 100/2/G50H A0CM[T]5			10.2	7.8	5.3	2.8	
④ DGE 150/2/G50H A0CM[T]5			11.9	9.8	7.5	5.1	2.7
⑤ DGE 200/2/G50H A0CM[T]5			13.2	10.8	8.3	6.0	3.7



Technical data

	V	Phases	P1 [kw]	P2 [kw]	A	Rpm	Ø	Free passage
① DGE 50/2/G50H A1BM5	230	1	-	0.37	2.8	2900	G 2"- DN50 PN10-16	35 mm
② DGE 75/2/G50H A1BM5	230	1	-	0.55	3.6	2900	G 2"- DN50 PN10-16	35 mm
③ DGE 100/2/G50H A0CM5	230	1	-	0.88	6.5	2900	G 2"- DN50 PN10-16	50 mm
④ DGE 150/2/G50H A0CM5	230	1	-	1.10	8.2	2900	G 2"- DN50 PN10-16	50 mm
⑤ DGE 200/2/G50H A0CM5	230	1	-	1.50	9.4	2900	G 2"- DN50 PN10-16	50 mm
① DGE 50/2/G50H A1BT5	400	3	-	0.37	1.1	2900	G 2"- DN50 PN10-16	35 mm
② DGE 75/2/G50H A1BT5	400	3	-	0.55	1.3	2900	G 2"- DN50 PN10-16	35 mm
③ DGE 100/2/G50H A0CT5	400	3	-	0.88	2.2	2900	G 2"- DN50 PN10-16	50 mm
④ DGE 150/2/G50H A0CT5	400	3	-	1.10	2.6	2900	G 2"- DN50 PN10-16	50 mm
⑤ DGE 200/2/G50H A0CT5	400	3	-	1.50	3.6	2900	G 2"- DN50 PN10-16	50 mm

Dimensions



Overall dimensions (mm)

	A	B	C	D	E	F	G	H	J	kg	X	Y	Z
DGE 100/2/G40V A0CM[T]5	260	100	405	125	GAS 1 1/2"	205	-	-	-	19	285	475	235
DGE 150/2/G40V A0CM[T]5	260	100	405	125	GAS 1 1/2"	205	-	-	-	20	285	475	235
DGE 200/2/G40V A0CM[T]5	260	100	405	125	GAS 1 1/2"	205	-	-	-	21	285	475	235
DGE 50/2/G50V B0BM[T]5	230	80	385	120	GAS 2"	165	-	-	-	12	225	385	245
DGE 75/2/G50V B0BM[T]5	230	80	385	120	GAS 2"	165	-	-	-	14	225	385	245
DGE 100/2/G50V B0CM[T]5	270	100	100	130	GAS 2"	205	-	-	-	19	285	475	235
DGE 150/2/G50V B0CM[T]5	270	100	100	130	GAS 2"	205	-	-	-	20	285	475	235
DGE 200/2/G50V B0CM[T]5	270	100	100	150	GAS 2"	205	-	-	-	21	285	475	235
DGE 50/2/G50H A1BM[T]5	220	80	365	65	GAS 2" - DN50	160	18	125	90°	12	225	385	245
DGE 75/2/G50H A1BM[T]5	220	80	365	65	GAS 2" - DN50	160	18	125	90°	14	225	385	245
DGE 100/2/G50H A0CM[T]5	260	100	430	80	GAS 2" - DN50	205	18	125	90°	19	285	475	235
DGE 150/2/G50H A0CM[T]5	260	100	430	80	GAS 2" - DN50	205	18	125	90°	20	285	475	235
DGE 200/2/G50H A0CM[T]5	260	100	430	80	GAS 2" - DN50	205	18	125	90°	21	285	475	235

Versions

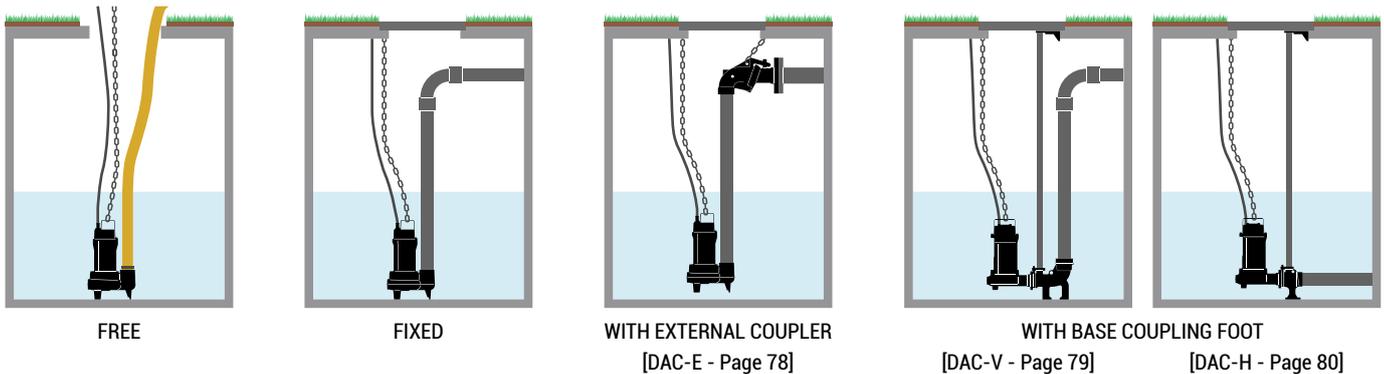
Single-phase models

- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Three-phase models

- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

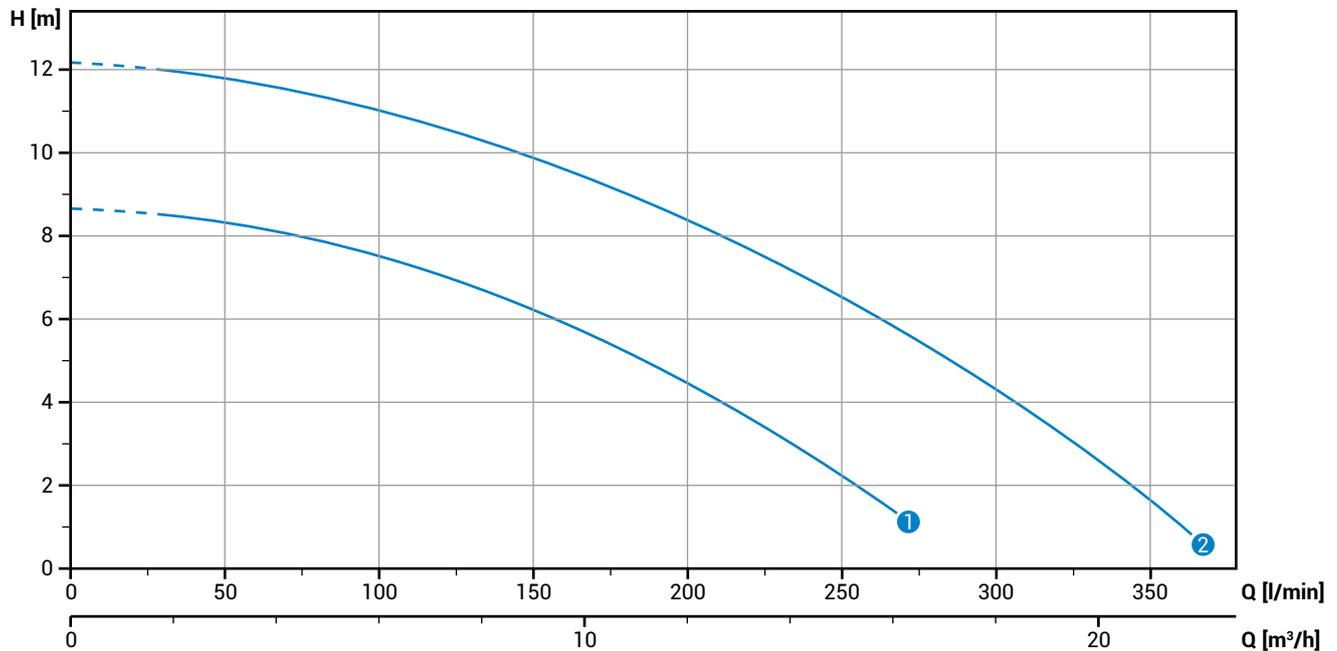
Installations



Models with vertical threaded discharge [GAS 1 ¼"] - 2 poles

Performances

	l/s	0	1	2	3	4	5	6
	l/min	0	60	120	180	240	300	360
	m³/h	0	3.6	7.2	10.8	14.4	18.0	21.6
①	DRE 50/2/G32V A0BM[T]5		7.1	5.2	2.8			
②	DRE 75/2/G32V A0BM[T]5		10.6	9.0	6.9	4.2	1.1	1.1



Technical data

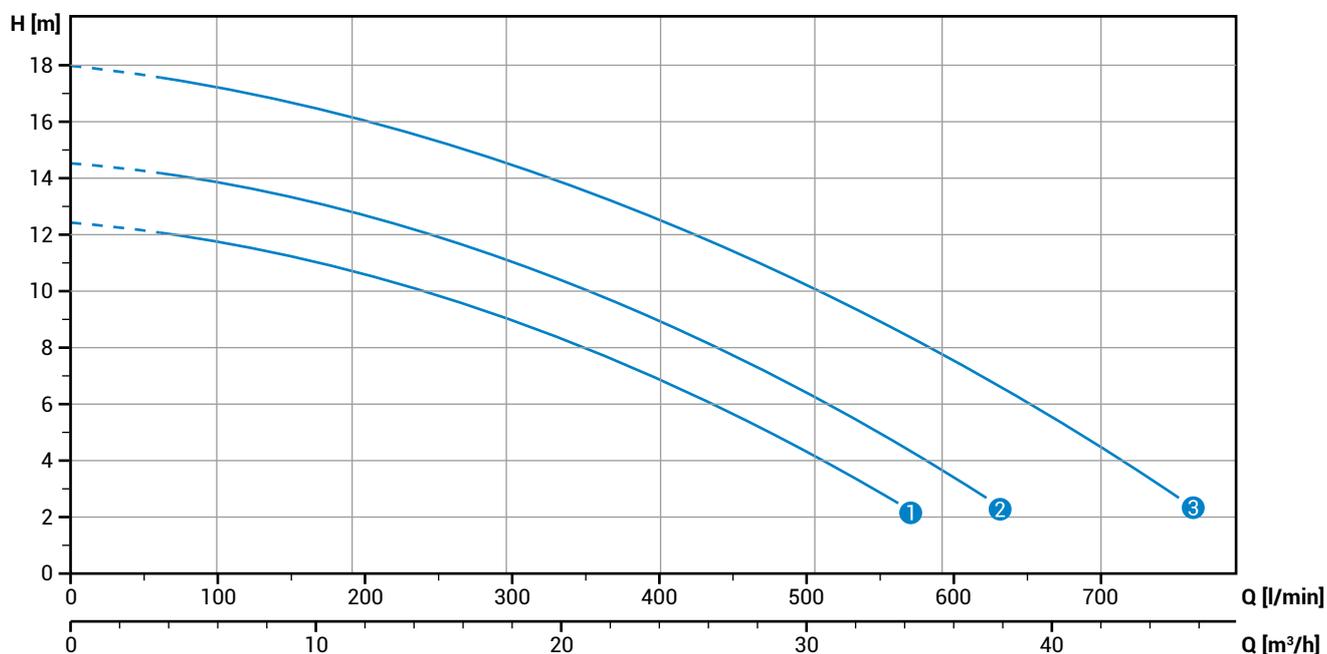
	V	Phases	P1 [kw]	P2 [kw]	A	Rpm	Ø	Free passage	
①	DRE 50/2/G32V A0BM/50	230	1	-	0.37	2.8	2900	G 1 ¼"	15 mm
②	DRE 75/2/G32V A0BM/50	230	1	-	0.55	3.8	2900	G 1 ¼"	15 mm
①	DRE 50/2/G32V A0BT/50	400	3	-	0.37	1.1	2900	G 1 ¼"	15 mm
②	DRE 75/2/G32V A0BT/50	400	3	-	0.55	1.3	2900	G 1 ¼"	15 mm

DRE

Models with vertical threaded discharge [GAS 2"] - 2 poles

Performances

	l/s	0	2	4	6	8	10	12
	l/min	0	120	240	360	480	600	720
	m ³ /h	0	7.2	14.4	21.6	28.8	36.0	43.2
① DRE 100/2/G50V A0CM[T]5			11.6	10.0	7.8	4.9		
② DRE 150/2/G50V A0CM[T]5			13.7	12.1	9.9	7.0	3.4	
③ DRE 200/2/G50V A0CM[T]5			17.0	15.4	13.3	10.7	7.6	3.9



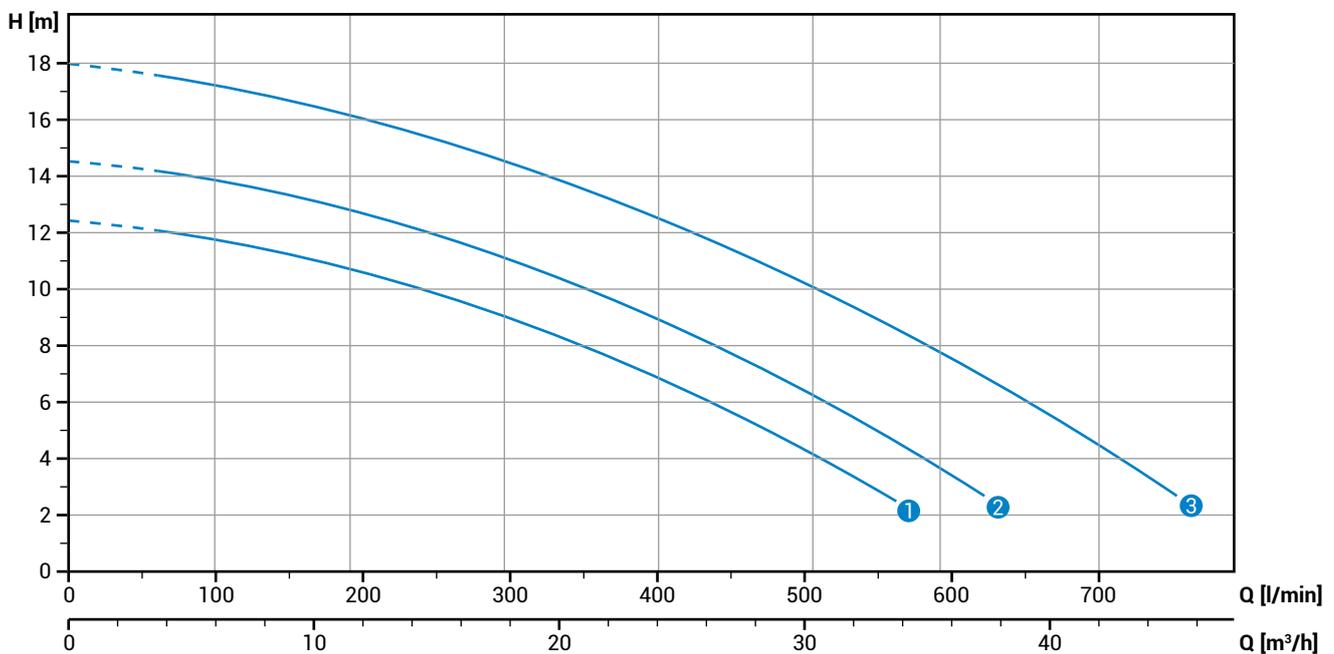
Technical data

	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
① DRE 100/2/G50V A0CM5	230	1	-	0.88	6.5	2900	G 2"	15 mm
② DRE 150/2/G50V A0CM5	230	1	-	1.10	8.2	2900	G 2"	15 mm
③ DRE 200/2/G50V A0CM5	230	1	-	1.50	9.3	2900	G 2"	15 mm
① DRE 100/2/G50V A0CT5	400	3	-	0.88	2.3	2900	G 2"	15 mm
② DRE 150/2/G50V A0CT5	400	3	-	1.10	2.7	2900	G 2"	15 mm
③ DRE 200/2/G50V A0CT5	400	3	-	1.50	3.5	2900	G 2"	15 mm

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

Performances

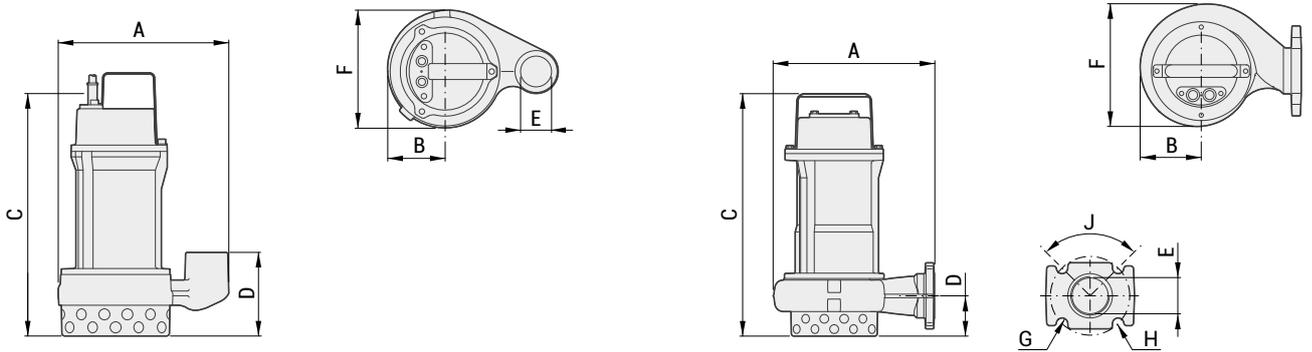
	l/s	0	2	4	6	8	10	12
	l/min	0	120	240	360	480	600	720
	m ³ /h	0	7.2	14.4	21.6	28.8	36.0	43.2
①	DRE 100/2/G50H A0CM[T]5		11.6	10.0	7.8	4.9		
②	DRE 150/2/G50H A0CM[T]5		13.7	12.1	9.9	7.0	3.4	
③	DRE 200/2/G50H A0CM[T]5		17.0	15.4	13.3	10.7	7.6	3.9



Technical data

	V	Phases	P1 [kw]	P2 [kw]	A	Rpm	Ø	Free passage	
①	DRE 100/2/G50H A0CM5	230	1	-	0.88	6.5	2900	G 2"- DN50 PN10-16	15 mm
②	DRE 150/2/G50H A0CM5	230	1	-	1.10	8.2	2900	G 2"- DN50 PN10-16	15 mm
③	DRE 200/2/G50H A0CM5	230	1	-	1.50	9.3	2900	G 2"- DN50 PN10-16	15 mm
①	DRE 100/2/G50H A0CT5	400	3	-	0.88	2.3	2900	G 2"- DN50 PN10-16	15 mm
②	DRE 150/2/G50H A0CT5	400	3	-	1.10	2.7	2900	G 2"- DN50 PN10-16	15 mm
③	DRE 150/2/G50H A0CT5	400	3	-	1.50	3.5	2900	G 2"- DN50 PN10-16	15 mm

Dimensions



Overall dimensions (mm)

	A	B	C	D	E	F	G	H	J	kg	X	Y	Z
DRE 50/2/G32V A0BM[T]5	215	70	335	105	GAS 1 1/4"	150	-	-	-	11	225	385	245
DRE 75/2/G32V A0BM[T]5	215	70	335	105	GAS 1 1/4"	150	-	-	-	13	225	385	245
DRE 100/2/G50V A0CM[T]5	265	100	385	125	GAS 2"	190	-	-	-	19	285	475	235
DRE 150/2/G50V A0CM[T]5	265	100	385	125	GAS 2"	190	-	-	-	20	285	475	235
DRE 200/2/G50V A0CM[T]5	265	100	385	125	GAS 2"	190	-	-	-	21	285	475	235
DRE 100/2/G50H A0CM[T]5	255	95	385	65	GAS 2" - DN50	195	18	125	90°	19	285	475	235
DRE 150/2/G50H A0CM[T]5	255	95	385	65	GAS 2" - DN50	195	18	125	90°	20	285	475	235
DRE 200/2/G50H A0CM[T]5	255	95	385	65	GAS 2" - DN50	195	18	125	90°	21	285	475	235

Versions

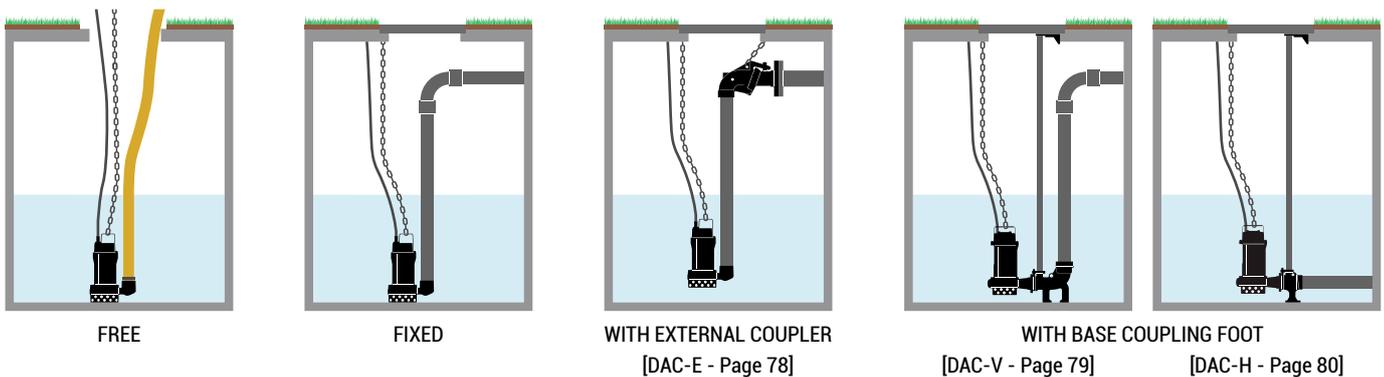
Single-phase models

- TC Thermal protection, capacitor
- TCG Thermal protection, capacitor, float switch

Three-phase models

- NAE No electric accessory
- TRG Thermal protection, relay for motor protection, float switch

Installations



ZENIT

PRODUCT RANGE

- › Electrical submersible pumps
- › **Lifting stations**
- › Accessories



Lifting stations

Flood Pump Kit • miniBOX • nanoBOX • blueBOX



Lifting stations

PE lifting stations are an effective solution for collecting and pumping wastewater to the sewer system, when a gravity feed is not available or distances are too great.

They are mainly used in rural or hilly areas with low population density, without an extensive municipal sewer system; or else following rezoning when connecting an area to the mains water network.

Given their many advantages, lifting stations are today the best choice for a low cost, safe and eco-compatible solution.

Flood Pump Kit



The kit comprises a DR steel pump and a discharge hose contained in a practical box. Always ready for use, it allows action to be taken quickly to drain areas subject to flooding in emergencies.

*mini*BOX



Allows you to create a bathroom in any part of a house, even if it is a great distance from the soil stack or below the invert level of the drain. *mini*BOX is able to grind all waste and pump it through normal diameter pipes to the soil stack.

*nano*BOX



Ideal for collecting water exclusively from domestic drains, including washing machines, showers and sinks [not suited for WCs]

*blue*BOX



Suitable for collecting and lifting clear, rain and wastewater from washing machines, sinks and WCs in systems installed at a lower level than the sewer, in locations such as garages or basements.

Flood Pump Kit



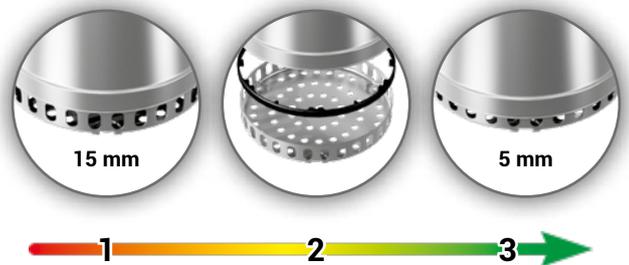
Range characteristics

Pumps	1 x DR steel 25
Start	Automatic with floatswitch/manual
Cabe	10 m with Schuko plug
Outlet pipe	Ø 2" - 10 m
kg	12

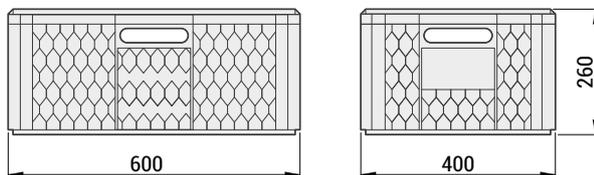
Zenit's **anti-flooding kit** comprises a DR steel TCG pump and a discharge pipe contained in a practical box. The quick fitting means the hose can be easily attached to the pump for quick intervention in emergencies. The incorporated float switch allows for automatic operation. All materials are corrosion resistant.

Operation and Use

Ideal for emergency drainage/pumping out of cellars, garages, basements, and all environments subject to flooding.



Dimensions



Recommended pumps

	0	0.5	1.0	1.5	2.0	2.5								
	l/s	l/min	m ³ /h	V	Fasi	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage			
DR steel 25/2 M50	8.5	7.0	5.7	4.0	1.3	230	1	-	0.25	2.3	2900	G 1¼"	10 mm	



Range characteristics

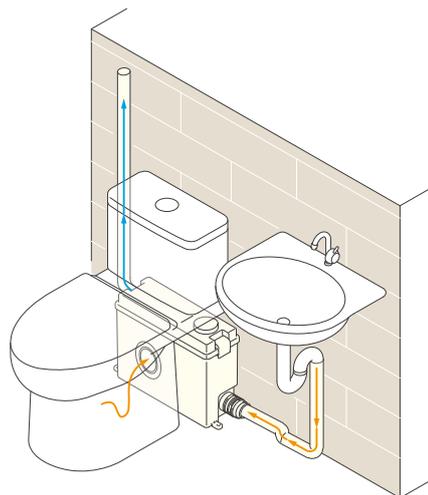
Capacity [l]	6
Installation	External, wall
Pump	GR steel
Start	Automatic with floatswitch
Cable	3x1 length 1.5 m
Outlet	DN32 / DN40
 kg	13.5

miniBOX makes it possible to create a bathroom in any part of a house, even if it is a great distance from the soil stack or below the invert level of the drain.

Once installed, **miniBOX** is able to grind all waste and pump it through normal diameter pipes to the soil stack.

It is composed of a PE tank with a GR steel pump with grinder inside it. It requires a normal electricity supply and can be installed directly on the toilet with significant space savings.

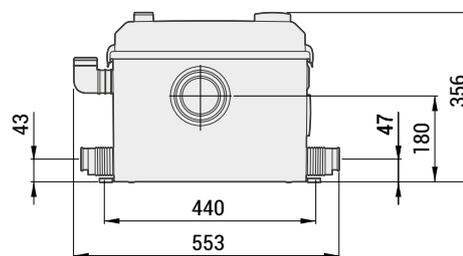
Installation



Operation and Use

miniBOX is suitable for collection and lifting of domestic black water and grey water from toilets, bidets, washing machines or dishwashers.

Dimensions



Recommended pumps

	Impeller type	V	Phases	P2 [kW]	A	Ø	Free passage
DR steel 25/2 M50	with grinder	230	1	0.37	3.1	G 1 ¼"	-

nanoBOX



Range characteristics

Capacity [l]	33
kg	8 [DR steel 25/2] ÷ 8.7 [DR steel 37/2]
Number of pumps	1
Power supply	220/240V ~1
Frequency	50 Hz
Protection	IP68
Inlet / Outlet	1 x DN30, 1 x DN40 / DN32 [male thread]
Start	Automatic with floatswitch
C° max water	35°C [for short periods up to 75°C]
Free passage	10 mm

Including: Zenit DR steel 25/2 or 37/2 pump; 10 m cable and integral float switch.

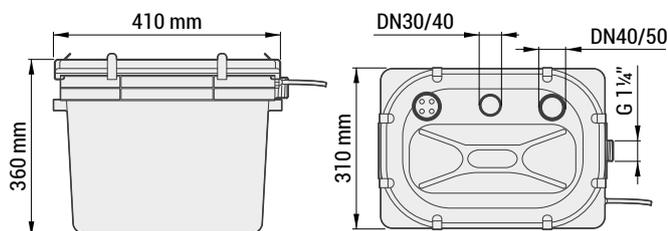
nanoBOX is a high quality polyethylene tank intended for collecting water exclusively from domestic drains, including washing machines, showers and sinks (not suited for WC's). The tank has a 33 L maximum capacity and is supplied with a Zenit Steel series submersible pump already installed.

Thanks to its construction and small footprint, **nanoBOX** is very versatile and easy to install.

Operation and Use

Ideal for collecting water exclusively from domestic drains, including washing machines, showers and sinks (not suited for WC's).

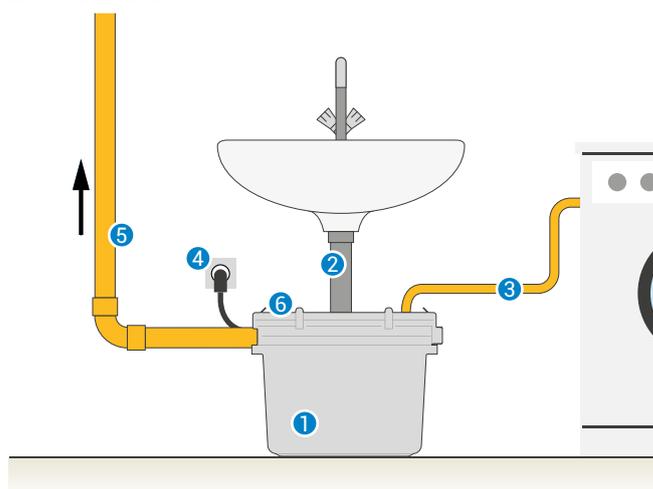
Dimensions



Recommended pumps

	l/s	0	0.5	1.0	1.5	2.0	2.5								
	l/min	0	30	60	90	120	150								
	m³/h	0	1.8	3.6	5.4	7.2	9.0	V	Phases	P1 [kW]	P2 [kW]	A	Rpm	Ø	Free passage
DR steel 25/2 M50		8.5	7.0	5.7	4.0	1.3	230	1	-	0.25	2.3	2900	G 1 1/4"	10 mm	
DR steel 37/2 M50		13.6	11.6	9.5	7.0	4.5	230	1	-	0.37	3.1	2990	G 1 1/4"	10 mm	

Installation



- 1 nanoBOX
- 2 Inlet from wash basin [with siphon]
- 3 Inlet from washing machine
- 4 Power supply
- 5 Outlet pipe
- 6 Breather outlet with activated carbon filter. Suitable to external breather pipe [optional]

blue **BOX**

The **blueBOX** range of high quality polyethylene tanks are extremely versatile and easy to install. They are suitable for collecting clear, rain and wastewater from washing machines, sinks and WCs in systems installed at a lower level than the sewer, in locations such as garages or basements.

The entire range use **blue** or **bluePRO** Series pumps, and are styled to match them.

The **60, 90, 150** and **250** models, suitable for domestic and small residential installations, are equipped to house one electric pump.

The **400** model, intended for civil plants, can be equipped with two electric pumps for complete reliability.

DESIGN BASED ON IN-DEPTH ANALYSIS OF THE CRITICALITIES REPORTED BY PROFESSIONAL USERS IN THE COLLECTION AND DISPOSAL OF DOMESTIC WASTEWATER



Range characteristics

60, 90, 150 and 250 models fitted to take one pump; up to two pumps can be installed for 400 model.

Direct installation possible for all models; coupler can be used for 250 and 400 models.

Walk-over cover

Gasket between tank and cover

Simplified intake, discharge and breather pipe installation with watertight gasket

Integral lifting handles

Emergency drainage fitting located low down in the unit

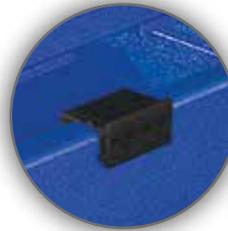
Patented watertight cable gland allowing easy pump removal

Side fins provide an excellent grip for in-floor installation



COVER

Rugged walk-over cover with gasket. The large cover allows a second pump to be added in emergencies, for easy, hygienic drainage.



CABLE GLAND

PATENTED modular cable gland system allowing the pump or float switches to be removed with no need to disconnect or extract the power supply cable.



INTAKES

Wastewater pipeline intake ports also provided on sides.



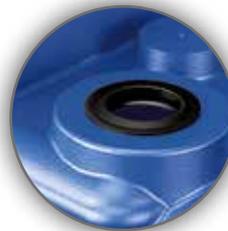
HANDLES

Two integral handles for lifting and transport, for easy transfer by hand.



DRAINAGE

Emergency drainage fitting located low down in the unit (threaded union included).



GASKETS

Guaranteed airtight thanks to NBR rubber seals which allow quick connection of pipes to the blueBOX with no need for sealants.



ANTI-OVERFLOW FLOAT SWITCH [OPTIONAL]

Connection to the alarm light and buzzer of a control panel, the float switch warns that the maximum filling threshold has been passed in the case of a pump failure or excessive inflow of wastewater to the tank, allowing quick action to prevent overflows.

blueBOX lifting stations can be installed on-floor or in-floor. They are prefitted for use with Zenit **blue** and **bluePRO** series pumps with vortex impeller [DRAGA] or with grinding system [GRINDER], which must be ordered separately depending on the requirements. Specifically, the **blueBOX 60** can also be used with multi-channel open impeller (DRENO) or high head (HIGH HEAD) pumps for higher heads when pumping clear or washbasin wastewaters.

The large number of intake and outlet pipeline fittings allow optimal installation even on existing plants.

The many hydraulic and electric accessories make **blueBOX** lifting stations convenient to install and use. All models are suitable for direct installation thanks to the bottom shaped to hold the pump in position without the aid of additional accessories.

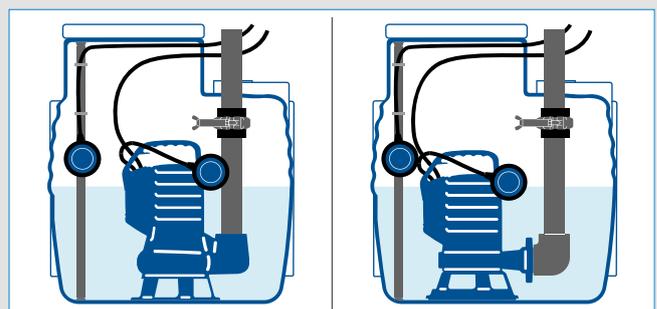
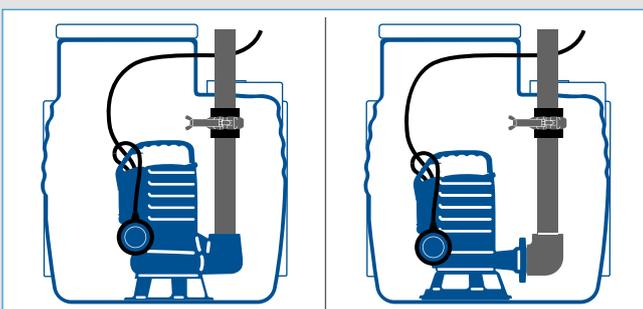
Convenient installation with a bottom coupler is also an option for the **250** and **400** models. A ball check valve and/or a gate valve can be connected to the end of the discharge pipe.



A coupling allows the pump to be easily separated from the plant for **any maintenance requirements, without disconnecting the pipes** from the lifting station.

For simple, labour-saving installation, use of pumps with START/STOP float switch is recommended.

An optional float switch with an overflow alarm function [for connection to an electrical control panel] can be also be used if required.



Installing a **blueBOX** lifting station could not be easier. The **blueBOX** lifting station is supplied partially assembled to minimise installation times. A large number of construction features simplify installation, and the accessories supplied allow the system to be optimised in all conditions.



Before putting the pump in place, drill holes in the sides of the tank in the chosen points using a flared grinding tool of the right diameter for the pipe to be used.



Fit the double lip seal provided. It guarantees perfect watertightness, with no further sealants required.



An emergency drainage hole should be drilled and then sealed using the through-wall fitting provided, or with an optional gate-valve.

The **blueBOX** can be installed on-floor or in-floor. Intake and discharge pipe fittings are provided on three sides, allowing installation to be optimised to requirements.



Connect the wastewater intake lines and the breather line (if used).

Then install the pump; this will be easier if the **blueBOX** is fitted with the bottom coupler. In this case, simply lower the pump along the guide pipes until it mates with the coupler.

For direct installation, fix the pump to the tube segment and connect this to the discharge pump using the metal collar.



The electrical cables are passed through special patented cable glands that ensure a perfectly watertight seal. Before fitting the cable, perforate the cable glands to be used with a sharp tool, but leave the others intact to keep liquids or smells inside the unit. If the pump has a plug, make a longitudinal cut down one side of the cable gland to allow the cable to pass without jeopardising the seal.



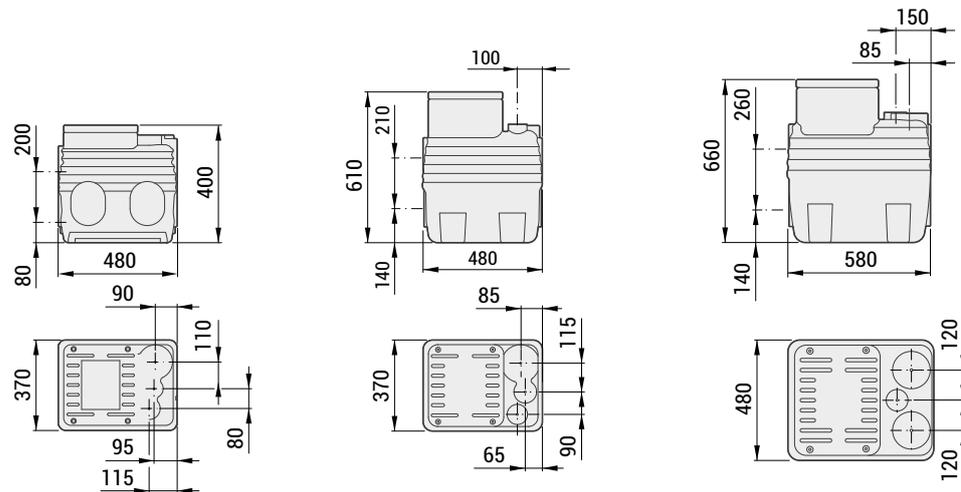
Once installation is complete, check operation of the pump and its float switches. Then replace the cover on the tank and secure it with the screws.

The **blueBOX** lifting station is ready for use. The vast range of plumbing and electrical accessories covers all installation requirements.



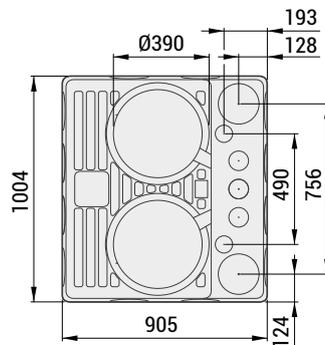
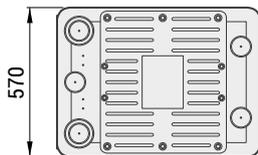
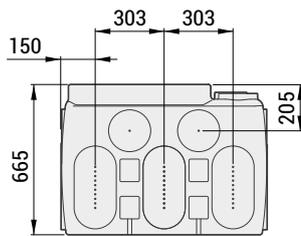
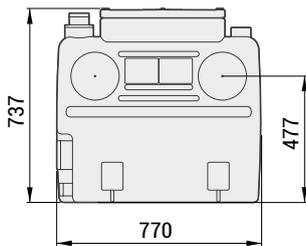


		blueBOX 60	blueBOX 90	blueBOX 150
Capacity [l]		60	90	150
Number of pumps		1	1	1
Pump type	clear wastewater	DR steel	DR steel	DR steel
	heavily soiled wastewater	DG steel	DG steel	DG steel
Max operation temperature		40°C [90°C short time]	40°C [90°C short time]	40°C [90°C short time]
Inlet [Ø max]		9xØ110 - 1xØ75	9xØ110 - 1xØ75	10 x Ø110
Outlet		1xØ1½" - 1xØ2"	1xØ1½" - 1xØ2"	1xØ1½" - 1xØ2"
Including	Accessories	cable gland, emergency draining connector, special support to reduce the float switch level [blue series pumps only]		
	Outlet pipe	Ø1½" [PVC]	Ø1½" [PVC] - Ø2" [PVC]	Ø1½" [PVC] - Ø2" [PVC]
	Gaskets	1xØ110mm, 2xØ50mm	1xØ110mm, 1xØ50mm	1xØ110mm, 1xØ50mm
 blueBOX only		8	9	11





<i>blueBOX 250</i>	<i>blueBOX 400</i>
250	400
1	2
DR steel	DR steel
DG steel - DG bluePRO - GR bluePRO	DG steel - DG bluePRO - GR bluePRO
40°C [90°C short time]	40°C [90°C short time]
6 x Ø110	12 x Ø110
1 x Ø1½" ÷ Ø2"	2 x Ø1½" ÷ Ø2"
cable gland, emergency draining connector	
Ø1½" [PVC] - Ø2" [ZN]	Ø1½" [PVC] - Ø2" [ZN]
2xØ110mm, 1xØ75mm	4xØ110mm, 2xØ75mm
1xØ1½", 1xØ2" [Outlet]	2xØ1½", 2xØ2" [Outlet]
15	31



Accessories supplied

Cable glands



Drain plug



Float switch stroke reducer



Additional configurations with submersible pumps from other Zenit families are possible. For further information, contact the Zenit Customer Service.

Optional accessories

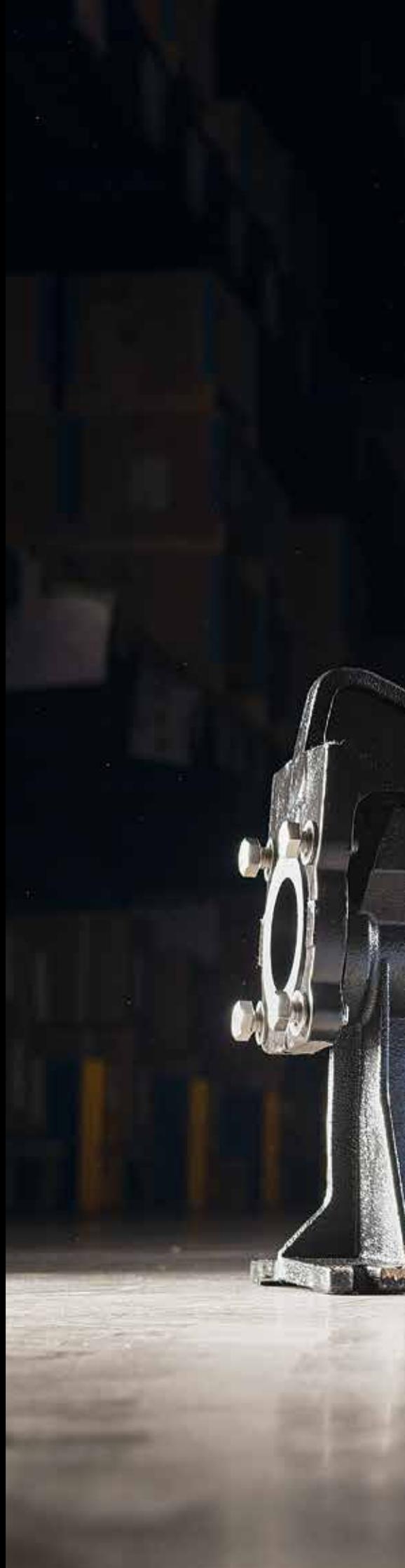
Electrical panel



ZENIT

PRODUCT RANGE

- › Electrical submersible pumps
- › Lifting stations
- › **Accessories**



Hydraulic and electrical accessories

DAC • VAP • KCR • KFL

FLOAT SWITCHES • CONTROL PANELS



Hydraulic Accessories

A large assortment of hydraulic accessories is available for each electrical submersible pumps to simplify installation and system compatibility.



Electrical Accessories

A wide range of control panels and accessories for monitoring and control of the pumps installed.



DAC

Couplers

This system allows the pump to be extracted and then quickly returned to the tank with no need to drain it, often an expensive operation involving lengthy plant stoppages. Perfect mating between flange and coupler is ensured on all units in the Zenit range by a rubber seal.

ESSENTIAL ACCESSORIES
FOR MAKING A
REVERSIBLE HYDRAULIC
CONNECTION BETWEEN
THE PUMP AND THE
DISCHARGE PIPE



Innovation

Zenit bottom couplers can have horizontal or vertical discharge in order to better adapt to the customer's needs.

All couplers are designed to receive 2 guide pipes which can accompany the pump into its working position, preventing troublesome rotation.

What's more, a PATENTED system simplifies pump release and reduces the mechanical stresses on the guide pipes, even after an extended period of time immersed in the wastewater.

Another special feature of the Zenit vertical couplers is that they are designed to keep the pump's intake

port at the ideal height, with no need to create a step in the bottom of the tank.

They therefore provide a considerable savings in terms of time and the costs involved in the building of collection tanks as well as easy replacement in pre-existing plants.

DAC-E

External couplers

The external coupler [DAC-E] consists of two parts: a fixed part for connection to the plant and a movable part connected to the pump by means of an optional threaded connecting pipe.

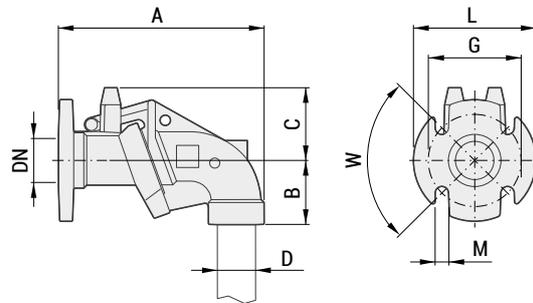
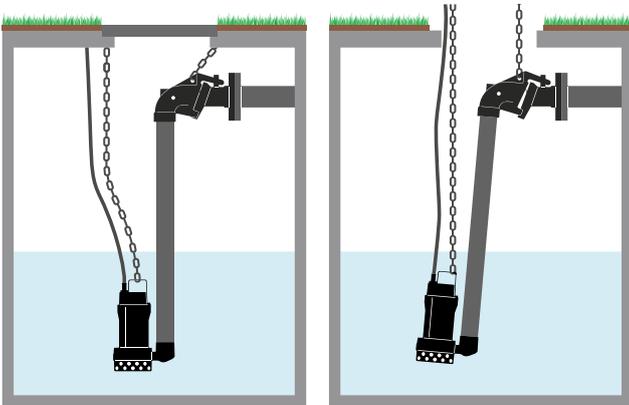
The two parts can be connected and disconnected without the aid of tools by means of a lever fixture.

Since this system remains above water level, it can be installed without draining the tank, often a complex, expensive process.

- GAS 2" thread discharge connection
- Fixed part in EN-GJL-250 cast iron, movable part in EN-GJS-600-3
- Epoxy-vinyl paint
- NBR rubber seals
- Full free passage
- Fixing to tank walls by means of DN50 PN10 flange or 2" GAS thread
- With a suitable male/female reduction adapter the accessory can also be used with pumps with 1 1/4" and GAS 1 1/2" discharge ports



Installation



Overall dimensions (mm)

	A	B	C	D	DN	G	L	M	W			X	Y	Z
DAC-E G50/50H EN	280	90	100	GAS 2"	GAS 2"	125	165	18	90°	8		225	385	245

DAC-V

Bottom couplers with vertical discharge

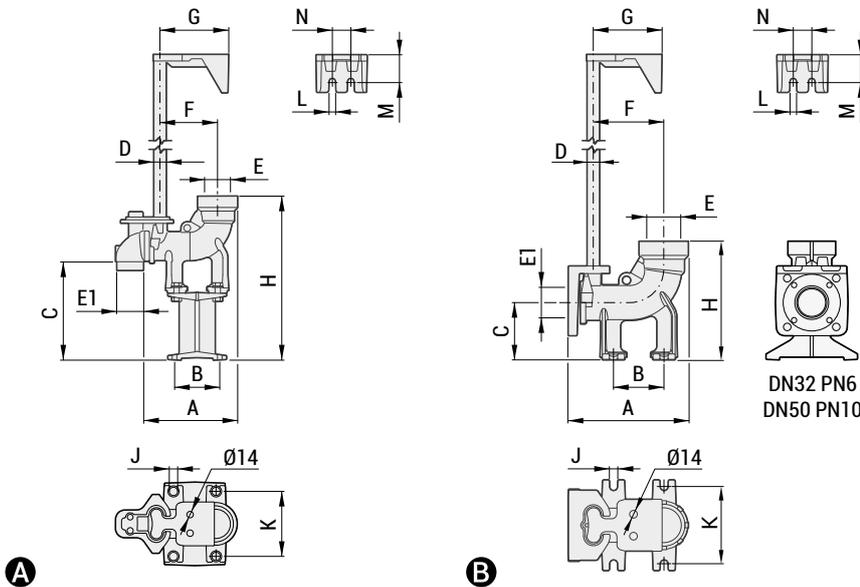
The bottom coupler with vertical discharge **[DAC-V]** is compact and rugged, suitable for installation in small pits. It allows the pump to be connected to the system and easily disconnected for servicing or storage even without draining the tank. The two guide pipes accompany the pump into position without troublesome rotation.

It can be completed with a 2" ball check valve for installation directly on the discharge.

With an adapter kit, the **DAC-V** can also be used with vertical discharge **blue Series** pumps.

A special valve incorporated in the **DAC's** body expels any air pockets that may form when the pit water level drops below the priming threshold, ensuring the pump is able to operate normally.

- Intake GAS 1 ½" ÷ 2" - DN32 PN6 ÷ DN50 PN10
- Discharge GAS 2" ÷ 2 ½"
- Body in EN-GJL-250 cast iron
- NBR rubber seal
- Epoxy-vinyl paint
- Full free passage
- Complete with fitting for connection to polyethylene pipe (Ø 63 mm) [GTP] or ball check valve [VAP]
- Complete with pipe guide and sliding flange with stainless steel fasteners
- GTP intake GAS 2 ½", discharge GAS 2"
- VAP intake GAS 2 ½", discharge GAS 2"



GTP



VAP

Overall dimensions (mm)

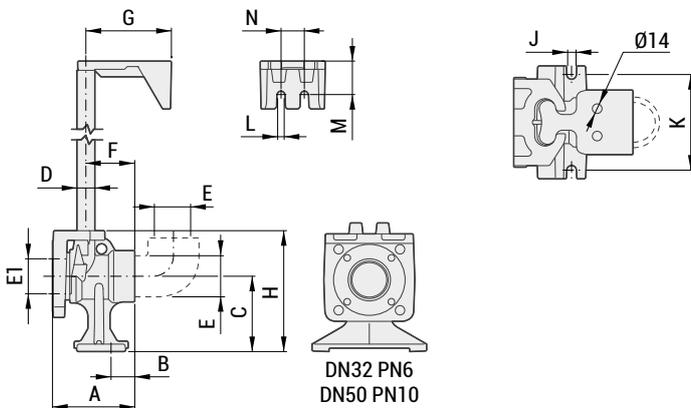
	A	B	C	D	E	E1	F	G	H	J	K	L	M	N	kg
A DAC G40V/G50V-G65V 3/4"+GTP (P)	200	90	165	Ø ¾"	GAS 2"- 2 ½"	GAS 1 ½"	130	125	360	14	140	12	50	35	9
A DAC G50V/G50V-G65V 3/4"+GTP (P)	200	90	220	Ø ¾"	GAS 2"- 2 ½"	GAS 2"	130	125	360	14	140	12	50	35	9
A DAC G40V/G50V-G65V 3/4"+VAP (P)	200	90	165	Ø ¾"	GAS 2"	GAS 1 ½"	130	125	360	14	140	12	50	35	11
A DAC G50V/G50V-G65V 3/4"+VAP (P)	200	90	220	Ø ¾"	GAS 2"	GAS 2"	130	125	360	14	140	12	50	35	11
B DAC 32-50/G50V-G65V 3/4" EN+GTP (P)	220	90	105	Ø ¾"	GAS 2"- 2 ½"	50	130	125	215	14	140	12	50	35	8
B DAC 32-50/G50V-G65V 3/4" EN+VAP (P)	220	90	105	Ø ¾"	GAS 2"	50	130	125	215	14	140	12	50	35	9

DAC-H

Bottom couplers with horizontal discharge

Bottom couplers with horizontal discharge are particularly compact, making them ideal for installations in tight spaces. They have 2 guide pipes which can accompany the pump into its working position, preventing troublesome rotation. If the discharge direction has to be modified, the device can be connected to an ordinary 90° threaded bend.

- Body in EN-GJL-250 cast iron
- NBR rubber seal
- Epoxy-vinyl paint
- Full free passage
- DN32-50 models complete with pipe guide, sliding flange (including stainless steel fasteners) and 2" GAS threaded bend in stainless steel
- Intake DN32 PN6 and DN50 PN10, horizontal discharge GAS 2"



Overall dimensions (mm)

	A	B	C	D	E	E1	F	G	H	J	K	L	M	N	kg
DAC 32-50/G50H-G50V+KAF 3/4" EN (P)	120	35	110	3/4"	50	GAS 2"	70	125	14	140	12	50	35	6.5	11

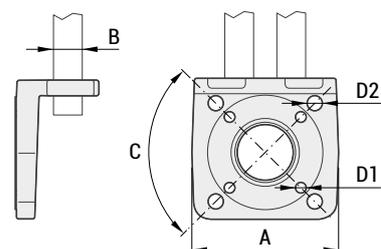
KAF

Sliding flange

Sliding flange for use of DAC-V and DAC-H bottom couplers with pumps with DN32-DN50 flanged horizontal discharge port

Compatible with other couplers with 3/4" guide pipes.

- Complete with NBR rubber seal and stainless steel fasteners
- Sliding flange for DAC-H and DAC-V
- Compatible with other couplers (check guide tube diameter)
- DN32 PN6 - DN50 PN10 flange connections



Overall dimensions (mm)

	A	B	C	D1	D2
KAF 32-50	130	3/4"	90°	M12	M16

VAP

Ball check valves

[VAP] ball check valves prevent backflow during plant maintenance or stoppages. They are designed for use even with soiled wastewaters to provide full guarantees of operation in heavy-duty working conditions. The sinking ball system ensures a free passage since, at maximum opening, the valve has a completely free main line, greatly reducing pressure drops. They can be installed horizontal or vertical and do not require any maintenance.

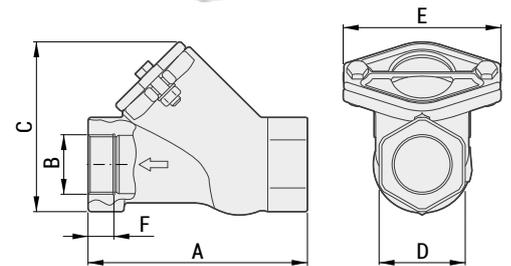
All Zenit **VAP** valves hold certification under the EN 12050-4 standard, appendix ZA.

The entire range of ball valves have "rubber on rubber" coupling (rubber ball; seal on rubber gaskets), guaranteeing quieter operation and easy restoration of perfect mating between the ball and the sealing lip.

- Structure in EN-GJL-250 cast iron with rubber seals included
- Sinking ball in NBR rubber
- Sealing ensured by rubber on rubber contact
- Stainless steel metal fasteners
- Epoxy paint resistant to aggressive liquids
- Full free passage
- Easily removable cover for plant inspection
- Can be installed horizontal or vertical
- Ambient temperature and pumped liquid: 0 ÷ +40°C
- pH of pumped liquid: 6 ÷ 11
- Density of pumped liquid: 1 kg/dm³



	Overall dimensions (mm)						kg			
	A	B	C	D	E	F		X	Y	Z
VAP G32	155	1 1/4"	120	60	110	20°	2	135	200	160
VAP G40	155	1 1/2"	120	60	110	20°	1.9	135	200	160
VAP G50	180	2"	150	72	115	25°	3	135	200	160



KCR

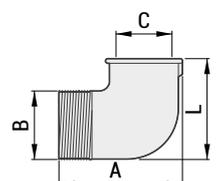
Discharge bends

[KCR] discharge bends are used for 90° changes in direction. They provide full free passage.

- Male-female thread (GAS 2")
- Stainless steel structure



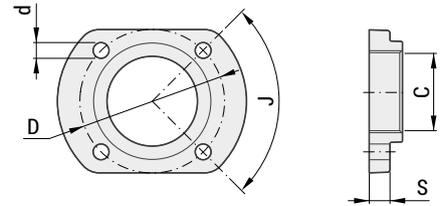
	Overall dimensions (mm)			kg			
	A	B - C	L		X	Y	Z
KCR G50/G50 [XX]	90	GAS 2"	90	0.7	230	130	180



Flanges

Complete range of threaded and welded flanges with holes in EN 1092-1 standard positions for maximum compatibility.

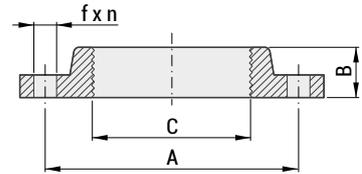
- Flange in GJL-250 cast iron painted with epoxy coating



Overall dimensions (mm)

	C	d	D	J	S	
KFL 32/G50	GAS 2"	M12	90	90°	15	0.75

- Threaded and welded flanges PN6 and PN10-16 in accordance with standard EN 1092-1



Overall dimensions (mm)

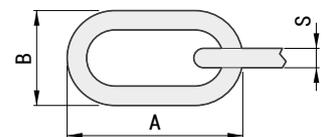
	A	B	C	f	n	
KFL /G50 PN10-16	125	30	GAS 2"	18	4	2.8

KAT

Chains

Stainless steel chains for handling pumps and accessories.

- Stainless steel chains
- Suitable for lifting pumps from tanks and wells.



Overall dimensions (mm) Weight Max load (*)

	A	B	S	gr/m	
AISI 316	33	19.5	5	482	325

(*) Uncertified approximate loads

FLOAT SWITCHES

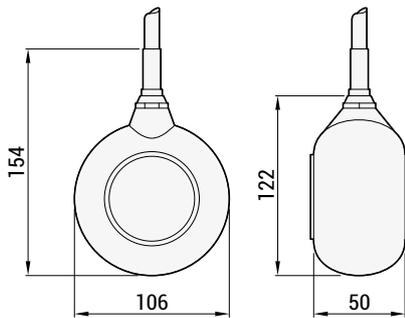
For controlling electric pumps

Zenit float switches are specifically for use with submersible pumps and can easily be fitted with counterweights for precise calibration of switching levels. LEVEL float switches are recommended for installation in large tanks in view of their long strokes, and are suitable for use with soiled wastewaters. They are multicontact type, and can therefore be connected in "normally closed" or "normally open" configuration, for both filling and emptying functions.

MAC3 float switches are recommended for installation with clear or slightly soiled wastewaters and can be used for emptying only, since they are designed for operation solely in ON/OFF mode.

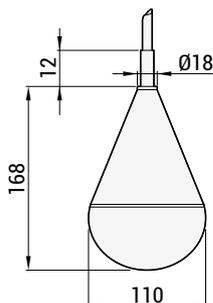
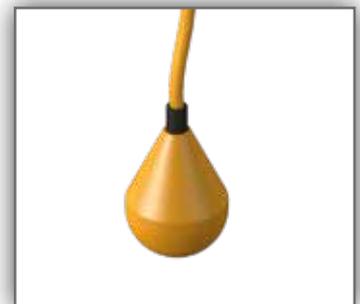
MAC 3

	Type	Cable					
		Wires	Length [m]	X	Y	Z	
10A / 250V	H07RN-F	3G1	5	120	225	160	
10A / 250V	H07RN-F	3G1	10	120	225	160	



LEVEL

	Type	Cable					
		Wires	Length [m]	X	Y	Z	
6A / 250V	PVC	3G x 0.75	10	240	240	100	
6A / 250V	PVC	3G x 0.75	20	240	240	100	



CONTROL PANELS

Standard electronic

ZENIT electronic control panels designed to control 1, 2 or 3 single-phase pumps with power from 0.37 kW up to 2.2 kW or 1, 2 or 3 three-phase pumps with power from 0.55 kW up to 15 kW.

The exceptional operational versatility reduces the amount of stock required, since a single panel covers various powers.

Designed for use with float switches or level sensors, they allow users to set alternating pump duty cycles and maximum or minimum level alarm output.

- Ambient temperature -5/40°C
- Relative humidity 50% at 40°C (non-condensing)
- IP55 protection rating
- Main disconnect switch with door lock
- Transformer for auxiliary circuits
- Provision for start-up capacitors (single phase version)
- Motor and auxiliary circuit protection fuses
- Adjustable motor current overload protection with reset function
- "Power ON", "Motor running" and "Thermal cut-out trip" LED indicator lights
- Minimum or maximum level alarm output
- Alternating relay (for multiple pumps)



Full service electronic

ZENIT offers its customers a state-of-the-art management and control tool, for their pumping systems in addition to standard electronic control panel functions: a multilingual menu allows the users to select the operating mode best suited to requirements, optimising running and maintenance costs.

With the aid of an optional APP, users can monitor all system operation aspects at all times, receiving alarms of any kind and/or modifying operating modes remotely using their smartphone or tablet.

- Display with operating data display and operating mode setting
- Four default operating modes
- Self-learning of motor data

with the APP you can also

- Manage the system on your smartphone or tablet
- Start-up/shut down the pumps remotely
- Receive all types of alarms and fault warnings
- Modify the operating mode
- Modify safety device trip thresholds
- Simultaneously manage numerous different systems





ZENO

NAVIGATOR SUITE

One-click access to the right solution for you

Zeno Navigator Suite is a platform of services offered by Zenit. A very effective on line and mobile tool for managing the entire pre- and after-sales process.

Designed to meet the needs of sector professionals, whether you are an engineering firm, a plant operator or just an installer, the ZENO portal is an extremely effective tool for managing your business.

The ZENO Pump Selector application provides useful assistance throughout the electric pump selection and configuration process, and the product that meets the search parameters can be swiftly identified through selection by duty point or type of hydraulics.

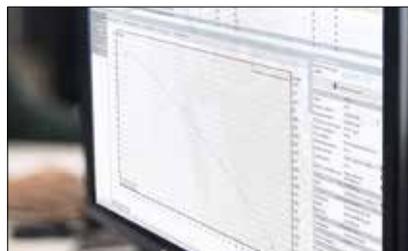
ZENO Navigator Suite

Web: zenonavigator.zenit.com

Mobile, ZenoApp on smartphone and tablet, available for iPhone and Android

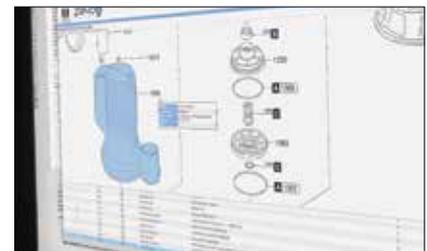


Offline, on digital medium



Pump Selector

The application that provides invaluable assistance for the entire Zenit electric pump selection and configuration process, right through to generation of the final quotation.



Spare Parts

It is a quick, user-friendly tool enabling you to easily select the spare part you require, add it to your cart and automatically send us the order, with just a few clicks.



zenonavigator.zenit.com



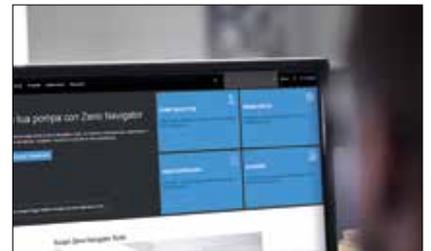
Academy

The Academy selection offers you all information required for knowledge of and training in Zenit products and services.



After-Sales Service

Zenit has made meticulous design and construction its calling-card. If problems of any kind arise, Zenit provides effective service through its dealers worldwide.



Download

You have access to a library of Zenit and industry technical and commercial documentation.

ZENIT

PRODUCT OVERVIEW



Electric Pumps - Domestic

A wide range of electrical submersible pumps, with channel or Vortex impellers or with grinding system, for use in the domestic sector.



sphereBOX

Lifting station for wastewater of civil and industrial origin, available in 600, 900 and 1200 litre versions.



Aeration and mixing systems

A line of aeration and mixing products for the civil and industrial wastewater treatment sector.



Electric Pumps - Professional

A wide range of electrical submersible pumps that covers all requirements in the industrial and professional sector.



Uniqa - High efficiency

The **UNIQA** range is the ideal solution for any kind of civil and industrial installation thanks to the wide choice of high-efficiency motors up to 355 kW.



blueBOX

The **blueBOX** series consists of high quality rotary moulded polyethylene tanks for collecting grey and black wastewater.



BOX PRO

The **BOX PRO** series comprises rugged medium density polyethylene lifting stations, for use in large capacity civil and residential applications.



Hydraulic accessories

Our accessories range includes base plates, couplers, check valves, gate valves and flushing valves.



Electrical accessories

A wide selection of electrical and electronic control panels and alarm devices for convenient, efficient control of your system.



better together

The data provided are not binding.
Zenit reserves the right to modify the product without advance notification.



For further information, visit www.zenit.com

Cod. 29040040001800000
Rev. 6 - 01/11/2020

The digital version of this catalogue is available for download at: www.zenit.com