GRUNDFOS PUMPS FOR HOME AND GARDEN





BE > THINK > INNOVATE >

MOVING LIQUIDS

No matter what volume, pressure, lift or liquid to be pumped, Grundfos can supply precisely the pump needed for the task in hand.

Worldwide many installers are already familiar with the Grundfos range of household pumps. From the trusted CH Pressure Systems to the stainless KP wastewater pump, millions of customers can testify to the simplicity of installation and reliability of our household pump series.

This catalogue covers the full range of household pumps and introduces pumps and pumping systems for more demanding or specialised jobs.

WATER SUPPLY

SELF PRIMING

JP5 / JP6	16
JPRain	44

PRESSURE SYSTEMS

CM BOOSTER	8
CME BOOSTER	10
CH-PC & CH-PT	12
PM RAIN	14

SUBMERSIBLE

SB	17
SPO	18
SQN / SQEN	20

WASTEWATER AND DRAINAGE

SOLOLIFT2	26
UNILIFT CC	28
KP / AP12	30
AP35 / AP50	32
AP35B / AP50B	34

HOT WATER AND HEATING

38
39
40
41

HOUSEHOLD B-LINE

JPRain	44
NSB	46
КРВ	47



SELF-PRIMING

Ideal for one or multiple tap outlets to your garden, toilet and laundry, the Grundfos JPRain range offers a reliable solution to help you utilise your collected rainwater in the best possible way.

PRESSURE SYSTEMS

This range of Grundfos pumps and tanks are designed for any pumping application involving clean and non-aggressive water in household, small scale irrigation and booster applications.

SUBMERSIBLE

Grundfos submersible pumps are easy to handle and suitable for a variety of applications such as domestic water supply and irrigation.









WASTEWATER AND DRAINAGE

Grundfos wastewater and drainage pumps are designed to make pumping from household applications as simple and efficient as possible.







HOT WATER AND HEATING

The Grundfos range of circulators for heating and hot water re-circulation are available in a variety of materials and finishes to cover even the most exceptional tasks.

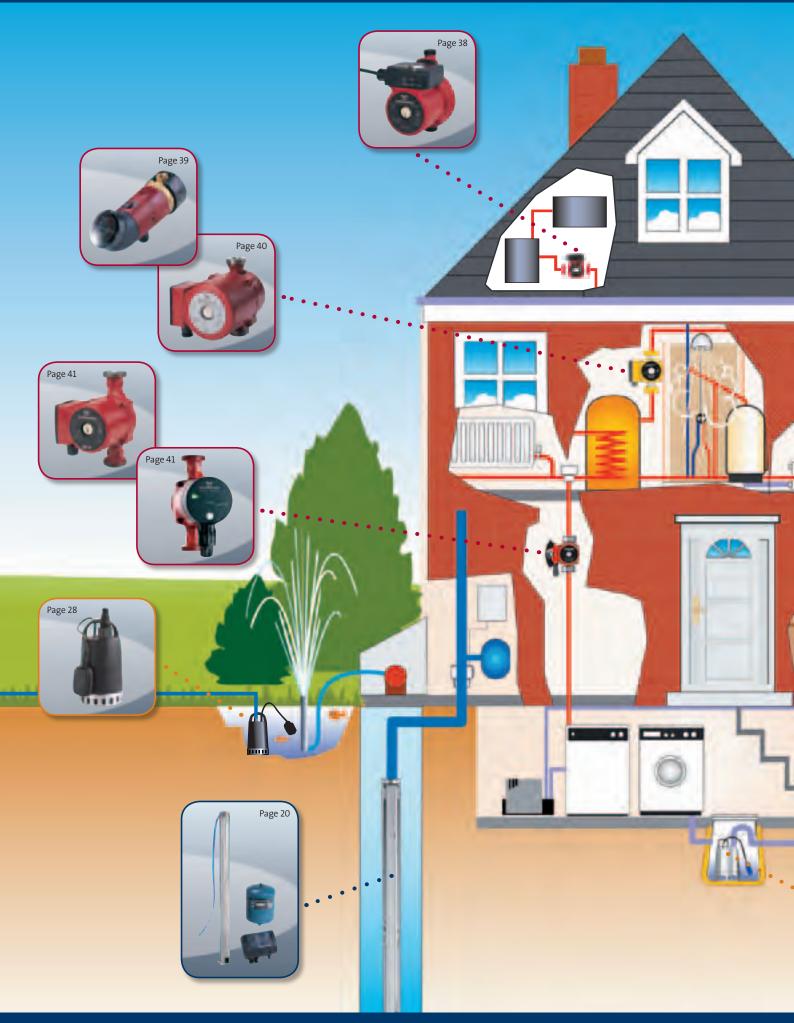




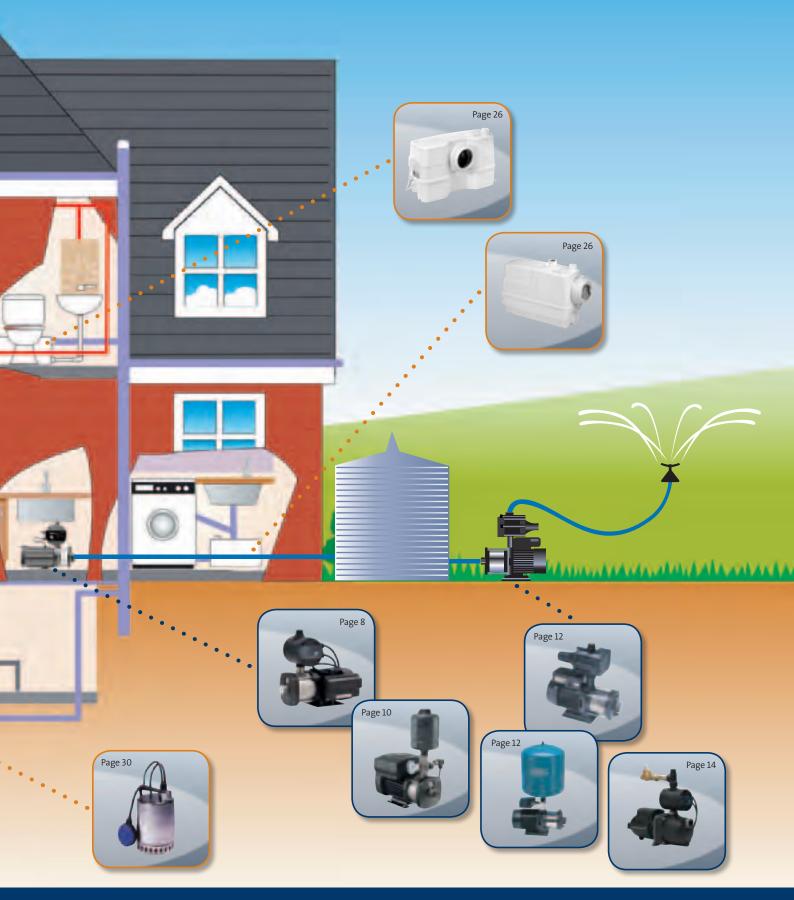


A range of quality pumps for home and garden.













WATER SUPPLY

Making water work

Grundfos has water supply pumps for a wide range of domestic applications such as raw water supply, pressure boosting, irrigation and dewatering. Each product ensures constant supply of fresh water to your home and garden, while offering different features and benefits in relation to performance, comfort and convenience.

The Grundfos CM Booster is a horizontal multistage centrifugal pump designed for domestic and light industrial applications. It is suitable for pressure boosting from above ground rainwater tanks or from mains water.

FEATURES

- Quiet operation
- Compact design
- Robust construction
- Dry run protection
- Easy installation
- Adjustable cut in pressure (PM2)
- Generator friendly

CONSTRUCTION

- All wetted parts stainless steel
- Hard wearing carbon / ceramic seal
- IP 55 Motor
- Complies with AS/NZS 4020 testing for products for use with drinking water

PERFORMANCE Discharge Pressure (kPa/psi) Pumps 150 200 250 300 22 29 36 44 Output (I/min)

CMB 1-4	40	33	26	18	-	-	-
CMB 3-3	65	50	26	-	-	-	-
CMB 3-4	-	63	53	38	20	-	-
CMB 3-5	-	69	61	52	41	26	-
CMB 3-6	-	-	68	63	55	47	36
CMB 5-3	99	79	44	-	-	-	-
CMB 5-4	-	100	85	67	30	-	-
CMB 5-5	-	-	102	92	80	62	24

350

51

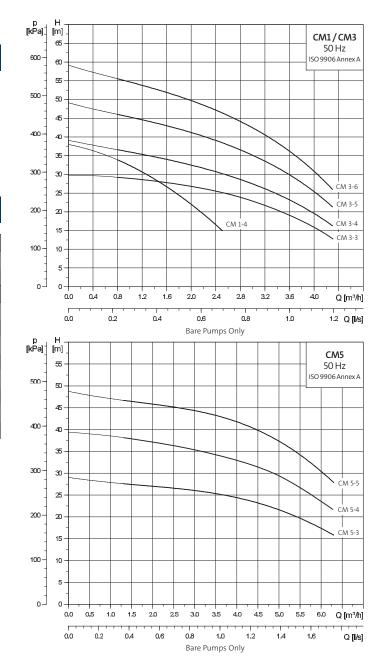
400

58

450

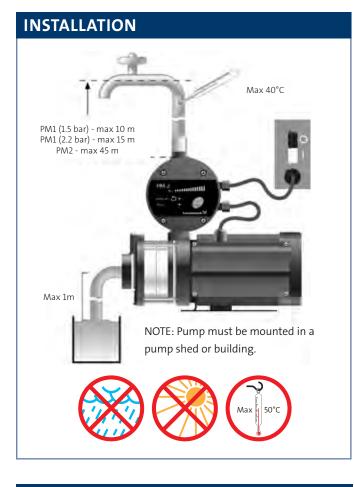
As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute







HOUSEHOLD WATER PRESSURE SYSTEMS



SELECTION

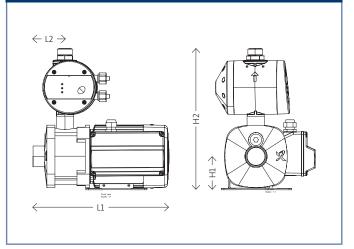
Current CH-PC Model	Suitable Replacement CM Booster**
CH2-30 PC	CMB 1-4
CH2-40 PC	CMB 3-3
CH2-50 PC	CMB 3-4
CH2-60 PC	CMB 3-5
CH2-60 PC	CMB 3-6
CH4-40 PC	CMB 5-3
CH4-50 PC	CMB 5-4
CH4-60 PC	CMB 5-5

**calculated at 3 bar

TECHNICAL FEATURES

							Dimensions (mm)						
Model	P2 (kW)	1phin (A)	Water Temp		Connection Size Outlet (A1)	Ц	L2 (centre of PM to outlet)	H2	H1	B2 (bolt hole centres)	Control	Weight (kg)	CH Equivalent
CMB 1-4	0.5	3.1	0/40°C	1"F	1"M	323	89.5	317	75	125	PM1	13.8	CH2-30PC
CMB 3-3	0.5	3.1	0/40°C	1"F	1"M	5.5	71.5	317	75	125	PM2	13.6	CH2-40PC
CMB 3-4	0.5	3.1	0/40°C	1"F	1"M	323	89.5	317	75	125	PM2	14.0	CH2-50PC
CMB 3-5	0.5	3.1	0/40°C	1"F	1"M	341	107.5	317	75	125	PM2	14.4	CH2-60PC
CMB 3-6	0.67	4.4	0/40°C	1"F	1"M	417	143.5	317	75	125	PM2	16.34	CH2-60PC
CMB 5-3	0.5	3.1	0/40°C	1¼"F	1"M	305	71.5	317	75	125	PM2	13.6	CH4-40PC
CMB 5-4	0.67	4.4	0/40°C	1¼"F	1"M	363	89.5	317	75	125	PM2	15.3	CH4-50PC
CMB 5-5	0.9	5.4	0/40°C	1¼"F	1"M	381	107.5	317	75	125	PM2	16.8	CH4-60PC

DIMENSIONS



PRESSURE MANAGER COMPARISON

Model	PM 1	PM 2
Power on indication	•	•
Pump running indication	•	•
Alarm indication	•	•
Dry-running protection	•	•
Free position in installation	•	•
Suitable for generator supply	•	•
Rotary outlet connection	٠	•
Integrated non-return valve	•	•
Cycling alarm	٠	•
Integrated pressure sensor from Grundfos Direct Sensors™		•
Adjustable start pressure		•
Start / stop with 1 bar differential pressure		•
Auto restart after dry running		•
Max. run time 30 min. (safety)		•
Pressure indication		•
Internal pressure tank		•

The Grundfos CME is a compact booster pump for water supply and boosting in domestic and light commercial applications. The integrated speed controller enables the CME to keep constant pressure in the pipe system.

FEATURES

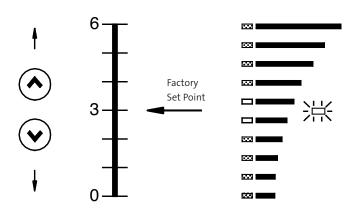
- Constant pressure via integrated speed control
- Dry run protection with auto-restart
- Easy installation & operation
- Quiet operation (55 dBA)
- Stainless steel construction for long life
- Built-in thermal protection (1 x 240 V)
- Inbuilt non-return valve

CONSTRUCTION

- Stainless steel shaft, impellers and pump housing
- Composite terminal box and fan cover
- All wet components are 304 Stainless Steel

CONTROL PANEL

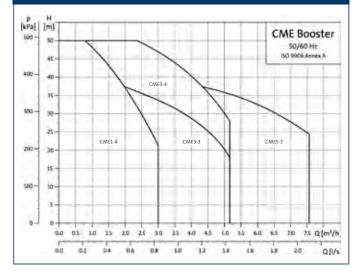
The CME pump can be operated manually by means of the control panel.



Set the desired setpoint by pressing the \uparrow or \downarrow buttons. The light fields on the control panel will indicate the setpoint set. Continuously pressing the \downarrow button will stop the pump.



PERFORMANCE



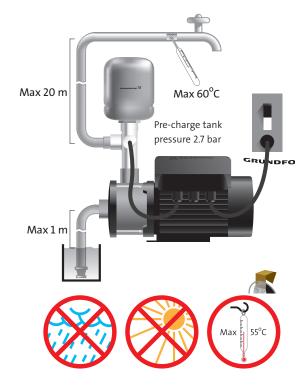
SELECTION

Current CH-PC Model	Suitable Replacement CME*
CH2-50 PC	CME1-4
CH2-60 PC	CME3-3
CH4-40 PC	CME3-3
CH4-50 PC	CME3-4
CH4-60 PC	CME3-4
CHIE4-60	CME3-4
CHIE8-20	CME5-3

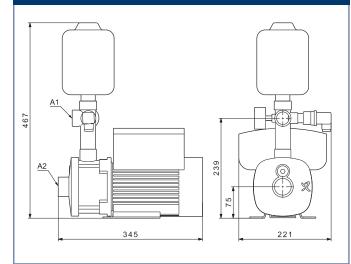
*calculated at 3 bar

INSTALLATION

NOTE: Pump must be mounted in a pump shed or building.



DIMENSIONS



TECHNICAL FEATURES

Pump			Water	Conne	Weight	
	P2 (kW)	1ph In (A)	temp	inlet (A2)	outlet (A1)	(kg)
CME1-4	0.55	3.4	0/60°C	1"	1"	22
CME3-3	1.10	6.6	0/60°C	1"	1"	23
CME3-4	1.10	6.6	0/60°C	1"	1"	24
CME5-3	1.10	6.6	0/60°C	$1^{1}/_{4}$ "	1"	23





Provides reliable pressure boosting and water supply while minimising annoying shower temperature fluctuations.

FEATURES

- CH-PC incorporates dry run protection
- Quiet operation
- · Vital parts made of stainless steel for a long life
- Built-in thermal protection (1 x 240 V)
- Electrophoresis coating to resist corrosion

CONSTRUCTION

- Stainless steel impellers, intermediate chambers and shaft
- Carbon / ceramic seal
- IP54 motor
- Insulation Class F
- Maximum ambient temperature: + 55 °C •

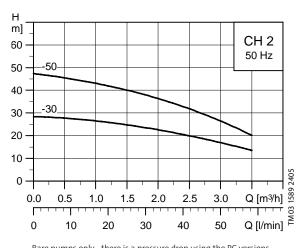
PERFORMANCE

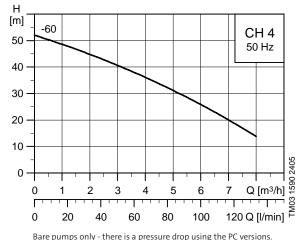
			Discharge	e Pressure	(kPa /psi))	
	150	200	250	300	350	400	450
	22	29	36	44	51	58	65
Pumps			Ou	itput (l/m	in)		
CH2-30 PC15	49	35	20	-	-	-	-
CH2-50 PC15	54	49	46	37	30	21	-
CH4-60 PC22	111	103	95	81	72	60	46
CH2-30 PT8	31	24	13	-	-	-	-
CH2-50 PT18	57	53	46	34	28	-	-
CH4-60 PT18	127	121	109	98	83	69	49

As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute



CH-PC & CH-PT





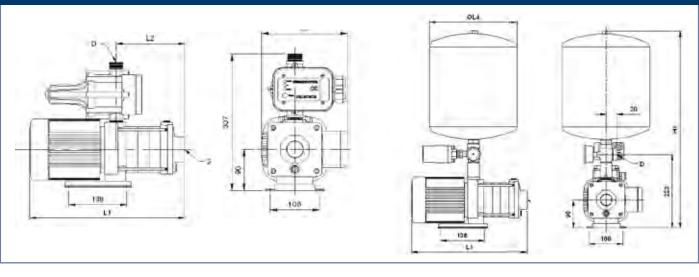
Bare pumps only - there is a pressure drop using the PC versions.

Bare pumps only - there is a pressure drop using the PC versions.



HOUSEHOLD WATER PRESSURE SYSTEMS

DIMENSIONS



TECHNICAL FEATURES

Pumps	P2	1ph	Water	Connections			Dim	ensions (mm)		Wei	ght	Cut-in/Cut-out		
	(kW)	In (A)	temp (°C)	inlet	outlet		L1	L2	L3	L4	H1	(k	g)	kPa	psi
					РС	PC PT						РС	PT	PT ve	rsion
CH2-30	0.30	2.3	0/65	1"F	1"M	1"F	324	117	188	202	556	11	13	140-245	20-36
CH2-50	0.45	2.9	0/65	1"F	1"M	1"F	368	154	188	279	620	12.7	14.7	200-385	29-56
CH4-60	1.05	7	0/65	1 ¼"F	1"M	1"F	466	217	206	279	620	16.6	18.6	245-460	36-66

Tank pressure set 10% below cut-in pressure



The Grundfos PM Rain is an interconnect device that allows you to utilise your harvested rainwater for toilet, laundry and garden applications, with the added benefit of mains water backup.

The PM Rain is used in conjunction with a Grundfos pump. The pump itself is only activated when rainwater is being drawn from the tank. It does not operate when switched to mains.

The PM Rain automatically starts when a demand is sensed – for example the flushing of a toilet or filling a washing machine - and will switch over to mains water when your tank is empty or in the case of an electrical failure.

Grundfos has incorporated a specially designed valve eliminating the need for an in-tank float – drastically decreasing installation time.

FEATURES

- The easiest, quickest system to install
- Does not require any regular maintenance
- Dual check valve for backflow prevention
- Suitable for above and below ground tanks
- Will automatically switch to mains water in the event of power failure

TECHNICAL FEATURES

- Maximum Flow Rate Pump 75 Lpm
- Maximum Mains Pressure limited to 200 kPa
- Maximum Water Temperature 40°C
- Maximum Ambient Temperature 50°C
- Mains water inlet size via dual check valve ³/₄" BSP (F)
- Voltage 240 V, 50 Hz



OPTIONS

The Grundfos PM Rain is available in a number of configurations:

Surface Mount – The PM Rain interconnect device can be fitted to one of our reliable JP or JP Rain range of pressure pumps, making it suitable for above ground tanks.

Submersible - The PM Rain interconnect device can be fitted to a submersible SB pump for in tank pump installations with either a wall or tank mount kit, making it a great solution for above and below ground tanks.

CONSTRUCTION

- The Grundfos PM Rain, JP Rain, JP and SB all comply with AS/NZS 4020 – Testing of products in contact with drinking water
- Always install under cover to protect from the elements

		Above Ground Tank	Above Ground Tank	Below Ground Tank
Type of House	Outlets	Basic Solution	Grundfos Quality Solution	Grundfos Quality Solution
Single Storey	1 x Toilet, Laundry and Outside Tap	JPRain2 PM Rain	-	-
	2 x Toilets, Laundry and Outside Tap	JPRain3 PM Rain	-	-
	3 x Toilets, Laundry and Outside Tap	JPRain4 PM Rain	JP5 PM Rain	SB 3-35 PM Rain
	4 x Toilets, Laundry and Outside Tap	JPRain4 PM Rain	JP6 PM Rain	SB 3-45 PM Rain
Double Storey	1 x Toilet, Laundry and Outside Tap	JPRain3 PM Rain	-	-
	2 x Toilets, Laundry and Outside Tap	JPRain4 PM Rain	JP5 PM Rain	SB 3-35 PM Rain
	3 x Toilets, Laundry and Outside Tap	JPRain4 PM Rain	JP6 PM Rain	SB 3-45 PM Rain



PM RAIN DEVICE

The PM Rain saves you more than just water. The 'floatless' operating system allows for speedy installation with no holes to drill or cable to conduit. The PM Rain comes complete with all of the features you would expect, such as automatic changeover and water source indication lights.

The PM Rain also incorporates further protection features such as leakage detection (to prevent rapid cycling). The PM Rain is fully certified to AS4020 - The *Standard* designed to test any product that comes in contact with drinking water. To further reduce the usage of precious mains water the incoming pressure is reduced to 200 kPa.

SB – ABOVE & BELOW GROUND TANKS

The SB submersible pump is silent when submerged and is therefore a noiseless alternative to external surface mounted pumps. The SB pump is built of composite and stainless-steel materials that are resistant to corrosion. The SB pump is available in two sizes for single or double storey houses.

JP RAIN – ABOVE GROUND TANKS ONLY

The JP Rain is the Grundfos entry level water harvesting pumping unit. Made from technopolymer plastics, the JP Rain will give many years of trouble free service. The JP Rain is available in three sizes for small single storey houses to large two and even three storey applications.

JP – ABOVE GROUND TANKS

The robust Grundfos JP stainless steel pressure pump is the premium choice in external pumps for rainwater harvesting. It is available in two sizes to better match your needs.





JP Rain Pump

SB Pump



The JP pump is a horizontal, self-priming, centrifugal pump for pumping clear water and other non-aggressive liquids.

This compact unit, which can be used in a fixed position or transported as required, is easy to maintain and is simple and economical to run.

FEATURES

- JP5 MP is coupled by a union to the reliable Mondial Press control
- Suction lift: up to 8 metres, including suction
- Carry handle
- Supplied with lead, plug and start/stop switch

CONSTRUCTION

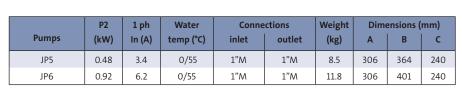
- Stainless steel pump housing and impeller. AISI 304
- Paint application by electrophoresis ensures the motor has excellent corrosion resistance
- Carbon/ceramic seal (CVBP)
- IP44 motor. Insulation Class F
- Single-phase models effectively protected against any accidental overload by built in thermal protection in the terminal box
- Voltage: 1 x 240 V, 50 Hz

PERFORMANCE

	Discharge	9	Suction Lit	ft (metres	;)		
	Pressure	0	2	4	6		
Pumps	(kPa /psi)		Output	utput (I/min)			
JP5 L	200/29	52	45	39	33		
JED L	250/36	38	29	23	16		
JP6 L	250/36	72	65	57	48		
JPOL	300/44	53	45	37	31		

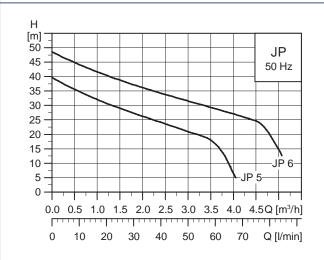
As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 🛣 = 15 litres per minute

TECHNICAL FEATURES



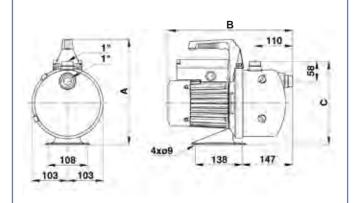


JP5 MP & JP5 / JP6



Performance based on zero suction lift

DIMENSIONS / INSTALLATION



The JP pump can be fitted with a Presscontrol for automatic operation. Automatic start/stop of the pump when the tap is opened/closed and dry running protection.



6" SUBMERSIBLE PUMP

APPLICATIONS

The SB pump is a submersible booster pump for the pumping of clean water ideal for rainwater systems, treated grey water irrigation, operating sprinklers, and pumping water from tanks.

The pump is available in two main versions:

with integrated suction strainer (1 mm mesh)
with side inlet which includes a flexible suction hose with floating suction strainer (1 mm mesh).

FEATURES

- Silent alternative to surface pumps
- Built in thermal overload protection
- Float switch option used for automatic operation or dryrunning protection of the pump

CONSTRUCTION

- Composite and stainless steel materials (resistant to corrosion)
- Anti-debris stainless steel strainer
- 1 x 240 V, IP68 motor, Class B

PERFORMANCE

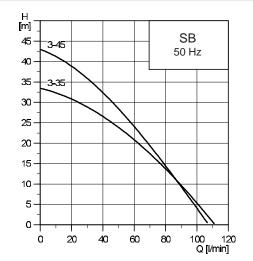
		Discharge Pres	ssure (kPa /psi)	
	200	250	300	350
Pumps		Output	(l/min)	
SB 3-35AW	65	43	24	-
SB 3-35A	65	43	24	-
SB 3-45AW	70	58	44	35
SB 3-45A	70	58	44	35

As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute

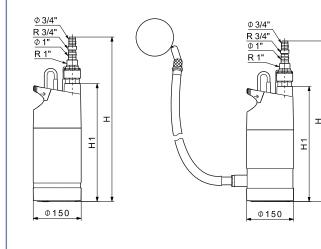
TECHNICAL FEATURES

Pumps	Cable (m)	P1 (kW)	1 ph In (A)	Outlet	Dimer D	nsions H
SB 3-35	15	0.80	3.8	1"F	150	397
SB 3-45	15	1.05	4.8	1"F	150	397





DIMENSIONS / INSTALLATION



GRUNDFOS

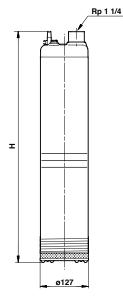
The SPO pump is designed for water supply, drainage, and pressure boosting in domestic homes and week-end cottages.

FEATURES

- 304 stainless steel hydraulic parts for a long life
- Double mechanical shaft seal ensures trouble free operation
- Easy to dismantle suction strainer allows cleaning if the strainer becomes clogged
- Supplied with cable, plug and built-in capacitor, and "quick-installation-guide" which makes installation quick and easy

CONSTRUCTION

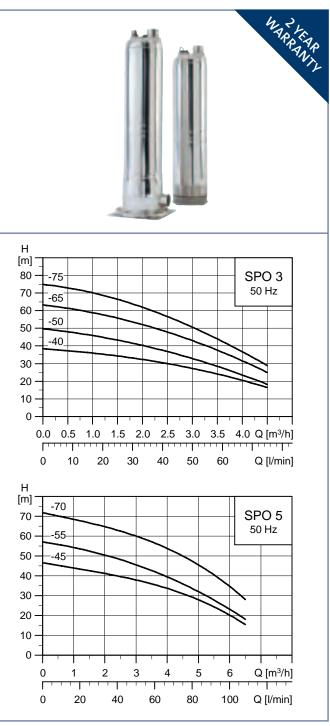
- Stainless steel impellers, chambers and shaft. (AISI 304)
- Single phase models with built-in thermal protection
- Maximum liquid max: 40 °C
- Max. pressure: 10 bar
- Voltage: 1 x 240 V, 50 Hz
- "A" model supplied with float switch



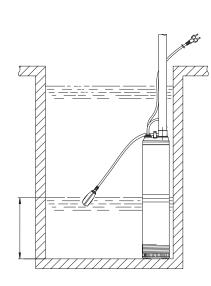
TECHNICAL FEATURES

Pumps	Cable	P2	1 ph	Water	Outlet	н	Weight	l/min	10	20	30	40	50	60	70	90	100	110
	(m)	(kW)	In (A)	temp		(mm)	(kg)	m³/h	0.6	1.2	1.8	2.4	3	3.6	4.2	5.4	6.0	6.6
SPO 3-40 (A)	20	0.75	4.80		1 ¼"F	546	16.80		37	36	33	30	27	23	19	-	-	-
SPO 3-50 (A)	20	0.75	5.90	Ξ	1 ¼"F	546	16.90		47	45	42	37	33	28	22	-	-	-
SPO 3-65	20	1.0	7.30	aximu	1 ¼"F	606	18.70		61	58	53	48	43	37	29	-	-	-
SPO 3-75	20	1.2	9.60	may	1 ¼"F	626	20.90	m Head	72	70	63	58	51	44	35	-	-	-
SPO 5-45 (A)	20	0.75	5.80	40°C	1 ¼"F	546	17.20		45	44	42	40	37	35	32	26	20	14
SPO 5-55	20	1.0	7.00	7	1 ¼"F	606	19.00		55	53	51	48	45	42	38	28	23	17
SPO 5-70	20	1.2	9.10		1 ¼"F	626	21.20		70	68	65	63	60	56	52	42	35	26

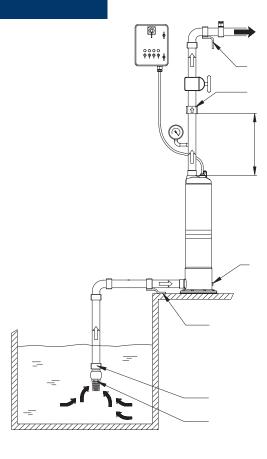
A = with level switch

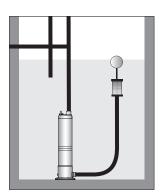


5" SUBMERSIBLE PUMP



INSTALLATION







The unique and compact design of the SQN/SQEN makes it suitable for a variety of applications including domestic water supply, light irrigation and pumping water for livestock.

FEATURES

- Borehole diameter 76 mm minimum
- Light weight for ease of installation
- Built-in dry run protection
- Constant pressure option (SQEN/CU301)

CONSTRUCTION

- Stainless steel housing (AISI 316)
- Composite impellers and chambers
- Built-in non return valve

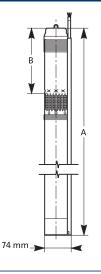


TECHNICAL FEATURES / PERFORMANCE



DIMENSIONS / INSTALLATION

SQ pumps do not require either a starter or dry run protection. Vertical or Horizontal installation (cooling sleeve recommended). Submersion depth: maximum 150 m and minimum 0.5 m below the static level of the water.

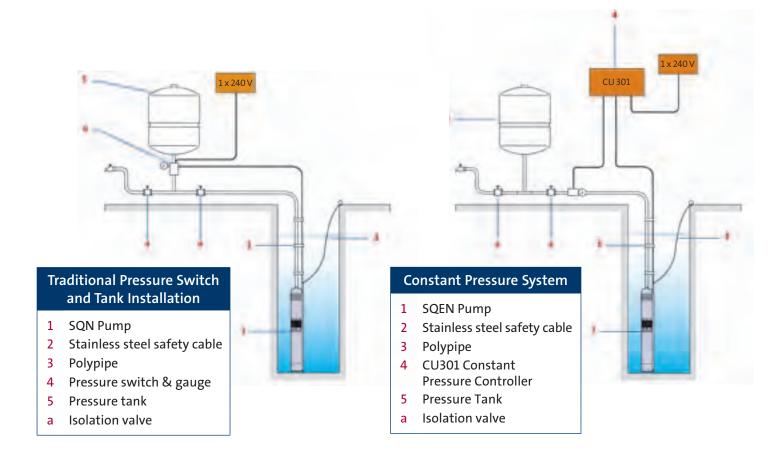


Pumps	P2	Full	Outlet	Weight	Dim	Discharge			Pumpi	ing wate	r level (n	netres)		
	(kW)	Load	size	(kg)	A	Pressure	9	12	15	18	21	24	27	30
(selected domestic models)		(A)			(mm)	(kPa /psi)			Ou	itput (liti	es per m	iin)		
SQN or SQEN 1-80	1.15	8.4	1 ¼"F	5.6	825		28	27	26	25	24	23	22	21
SQN or SQEN 2-55	0.7	5.2	1 ¼"F	5.8	741		44	41	39	37	34	30	27	-
SQN or SQEN 2-70	1.15	8.4	1 ¼"F	6.4	768		49	47	46	45	43	41	40	38
SQN or SQEN 2-85	1.15	8.4	1 ¼"F	6.5	825		53	51	50	49	48	47	46	44
SQN or SQEN 3-40	0.7	5.2	1 ¼"F	5.8	741		48	43	36	-	-	-	-	-
SQN or SQEN 3-55	1.15	8.4	1 ¼"F	6.4	768	300/43	60	58	56	53	50	46	43	39
SQN or SQEN 3-65	1.15	8.4	1 ¼"F	6.8	825		67	65	63	61	60	57	55	53
SQN or SQEN 3-105	1.85	12	1 ¼"F	7.4	942		-	-	73	71	70	69	68	67
SQN or SQEN 5-50	1.68	11.2	1 ½"F	6.1	824		95	91	86	80	75	67	63	50
SQN or SQEN 5-70	1.85	12	1 ½"F	6.4	941		111	109	106	103	100	98	95	91
SQN or SQEN 7-40	1.68	11.2	1 ½"F	7.1	860		111	103	93	83	70	-	-	-
SQN or SQEN 7-55	1.8	12	1 ½"F	8	860		135	125	118	111	104	96	86	75

As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute



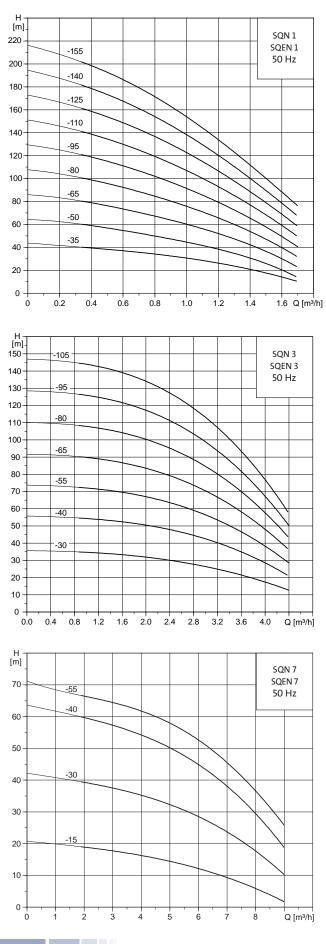
3" SUBMERSIBLE BOREHOLE PUMPS

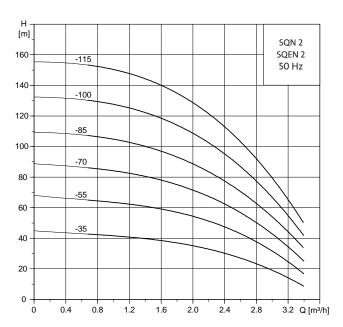


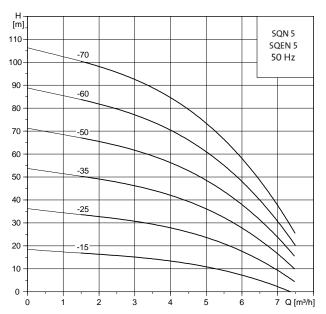


GRUNDFOS SQN/SQEN

3" SUBMERSIBLE BOREHOLE PUMPS









GRUNDFOS GT TANKS

HOUSEHOLD PRESSURE TANKS

APPLICATIONS

Grundfos pressure tanks are for cold water and are ideally suited and approved for use with drinking water.

The range assures reliable supply in both domestic and industrial situations.

FEATURES

- Potable water application
- Can be used with any Grundfos pump
- Five year warranty
- Tank capacity up to 450 litres on request
- Water Mark approved*

CONSTRUCTION

- The tanks have a non-toxic butyl rubber diaphragm, dividing the tank chamber in two compartments. The upper compartment contains compressed atmospheric air. The lower compartment has a liner in polypropylene (PP) and is filled with water from the pump
- Vertical installation
- Pre-charge pressure: 150 kPa / 22 psi

Note: the tank pressure must be checked at least twice a year. Set the tank pressure 10% below the pump cut-in pressure

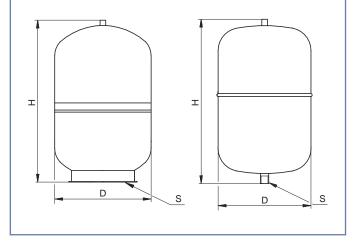




Tanks	Capacity (litres)	Water temp (°C)	Max Operating pressure (kpa)	Mounting type	Connection inlet		nsions m)	Weight (kg)
			(KPa)			D	н	
GT-H-8*	8	0/90	1000	Pipe	1"M	202	303	2.3
GT-H-18*	18	0/90	1000	Pipe	1"M	279	367	4.6
GT-H-60*	60	0/90	1000	Foot	1"F	388	528	10
GT-D-100*	80	0/90	1000	Foot	1"F	397	755	16
GT-C 80 PN8.6 Composite	80	0/90	860	Foot	25 mm	418	852	11
GT-C 130 PN8.6 Composite	130	0/90	860	Foot	25 mm	418	1227	15
GT-C 250 PN8.6 Composite	250	0/90	860	Foot	1 ¼"F	542	1303	26



DIMENSIONS / INSTALLATION



GRUNDFOS X



WASTEWATER

Taking wastewater to new levels

The reliable range of Unilift pumps take all the worry out of domestic drainage, whether it's clean or grey water, effluent or sewage.

The Sololift2 range of domestic lifting stations provide reliable handling of wastewater for any combination of toilet, sink, shower and washing machine. They make it simple to install extra bathroom facilities in locations remote from the main sewer connection.

HOME

Sololift2 lifting stations are a practical, compact, and ready to install solutions for discharging domestic effluent that cannot reach the main sewage pipe directly.

- The Sololift2 units grind and evacuate sewage and wastewater quickly
- Install bathroom facilities without having to cut into concrete foundations saves time and money
- Enables installations of toilets and showers where a natural slope cannot be established.
- The Sololift2 is ready to install offering easy installation and maintenance
- Wall hung and freestanding models cater to every space



FEATURES & BENEFITS

- The most powerful, reliable and service friendly lifting station on the market
- Lift out motor and pump unit for clean and easy service and maintenance no mess
- Captive screw fastening, external pressure switch and tank draining enable fast and clean repairs and service

CONSTRUCTION

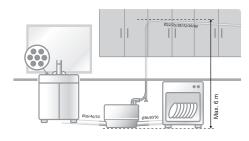
- Maximum liquid temperature: 50°C (90°C Sololift2 C-3 (30 min))
- Unique, welded, pressure tight tank to ensure safety and reliability particularly in high pressure grey water applications
- Smart adjustable inlet connectors allow movement of up to 10 mm, both vertically and horizontally for easy fitting to existing pipes
- 1.2 metre cable with plug

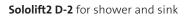
TECHNICAL FEATURES

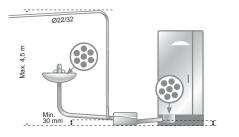
Pumps	Diamet	er (mm)	Power	Dim	ensions (mm)			-		
	Discharge	Inlet (connections)	(W)	н	L	w	l/min	30	45	55	60
Sololift2 WC-1	22/25/28/32/36/40	1 x 32/36/40	620	347	453	176		8	7.2	5.8	3.5
Sololift2 WC-3	22/25/28/32/36/40	1 x 32/36/40 2 x 36/40/50	620	347	453	176		8	7.2	5.8	3.5
Sololift2 CWC-3	22/25/28/32/36/40	1 x 32/36/40 2 x 36/40/50	620	368	495	164	m Head	8	6.8	5.0	2.5
Sololift2 C-3	22/25/28/32/36/40	1 x 32/36/40 2 x 36/40/50	640	255	373	158		8	7.2	6	5.4
Sololift2 D-2	22/25/28/32/36/40	2 x 32/36/40	280	147	299	165		8	3.38	1.98	-



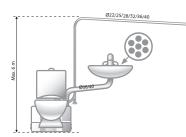
Sololift2 C-3 for washing machine and sink



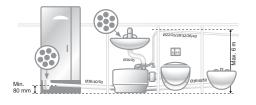




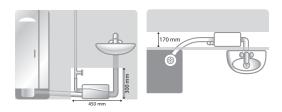
Sololift2 WC-1 for single toilet



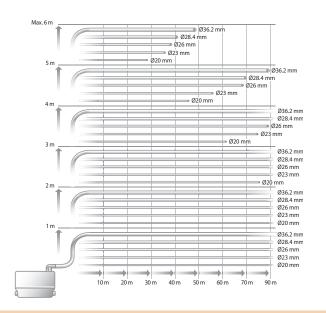




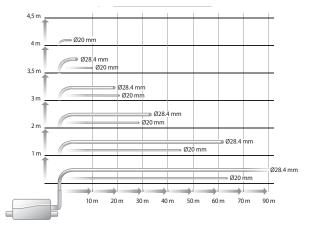
Sololift2 CWC-3 for shower, sink and wall-hung toilets



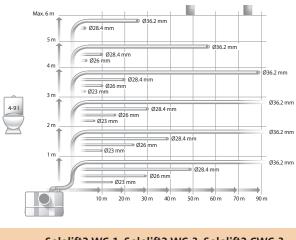
DIMENSIONS / INSTALLATION



Sololift2 C-3



Sololift2 D-2



Sololift2 WC-1 Sololift2 WC-3 Sololift2 CWC-3

Unilift CC are multi-purpose submersible drainage pumps designed to handle clean water, groundwater and grey wastewater with particles up to 10mm.

It must be completely or partly submerged in the liquid.

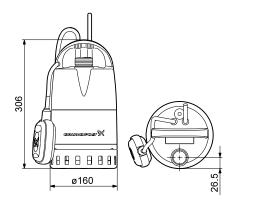
FEATURES

- Low-suction ability down to 3mm when the strainer is removed
- Self venting valve in the pump allows for optimal operation
- Adaptor for easy connection and non-return valve included
- Easy float switch adjustment to control start/stop levels
- Ceramic shaft seal with triple seals for efficient motor protection
- Includes built-in thermal overload protection

CONSTRUCTION

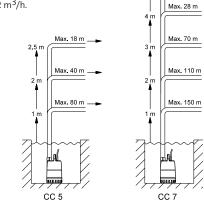
- Composite and stainless steel materials
- Robust stainless steel strainer, which allows free passage for particles up to 10mm
- Ceramic seal
- IP68 motor, Class B

DIMENSIONS



TECHNICAL FEATURES

	MARRAN THEAR
H m 7 7 6 5 6 5 6 5 6 7 6 6 5 6 6 5 6 6 7 6 6 6 6 6 6 6 6	Unilift CC 50 Hz
PERFORMANCE Recommended maximum pipe length (DN32) with a minimum flow of 2 m ³ /h.	4.5 m Max. 7 m



Installation depth: maximum of 10m below the water level.

Pumps	Cable	P1	1 ph	Water	Outlet Dimensions (mm)		Weight	l/min	0	30	60	90	120	150	
	(m)	(kW)	In (A)	temp (°C)		н	B1	(kg)	m³/h	0	1.8	3.6	5.4	7.2	9
Unilift CC5 A1	10	0.25	1	0/40	1 ¼"M	306	160	4.3	m Head	5.2	3.2	1.8	0.5	-	-
Unilift CC7 A1	10	0.38	1.8	0/40	1 ¼"M	306	160	4.6		7.4	6.1	4.8	3.8	2.6	1.1

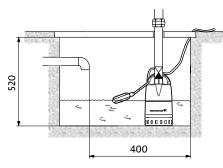
*70°C max. for 2 minutes at intervals of at least 30 minutes.

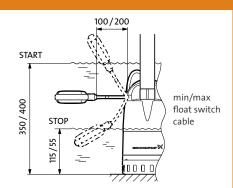


INSTALLATION

SPACE REQUIREMENTS

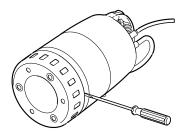
The pumps are supplied with 10 metres of cable. If the pump is installed in a pit, the minimum dimensions must be as in the drawing. The UNILIFT CC is equipped with a float switch with adjustable cable length.

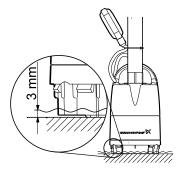




LOW SUCTION

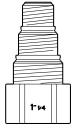
It is possible to obtain low suction by removing the suction strainer with a screwdriver. This makes the pump capable of pumping down to a liquid level of 3mm. The self-prime level is 5mm.

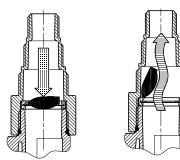


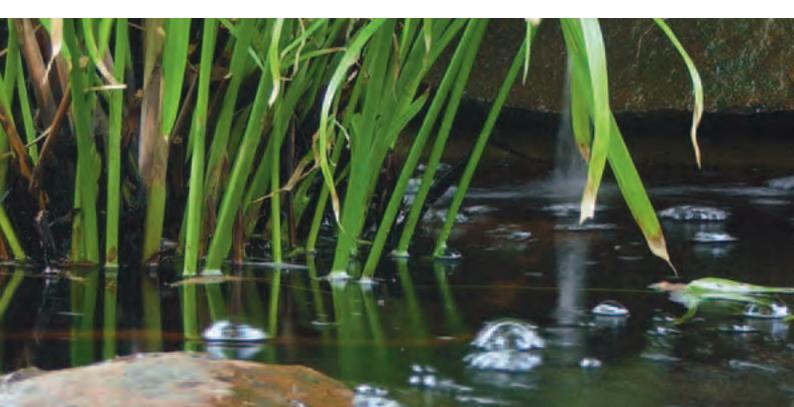


COMPONENTS INCLUDED

The pump is delivered with an adapter for connection and a non-return valve. The adapter has ¼", 1" and 1 ¼" external threads. The adapter has to be cut to fit the actual discharge pipe. The non return valve can be fitted in the adapter. It prevents backflow when the pump is stopped.







KP and AP12 pumps are portable, multipurpose, submersible stainless steel pumps for the transfer of clear, non-aggressive water, slightly soiled water and wastewater. These pumps work equally well automatically and manually and are designed for either fixed installation or mobile use.

- Lifting wastewater from washing machines, showers, wash basins, located below the drain pipe
- Drainage of flooded cellars, sumps etc
- Drainage or filling of swimming pools or tanks
- Transfer of liquids in agriculture, horticulture and industry
- Pumping water from shallow wells

FEATURES

- Compact design
- Stainless steel construction (AISI 304)
- Wide range, with automatic and manual versions. KP available with a standard float (A1) or a vertical float (Niro)
- Easy maintenance of the strainer and power/float cable

CONSTRUCTION

- Semi-open impeller
- IP68 motor
- Insulation Class F
- 1 x 240 V pumps include capacitor and thermal overload protection
- 3 x 415 V automatic pumps (A3) include control box with contactor, overload and 10 m float switch
- 3 x 415 V manual pumps (3) require a starter incorporating correct motor overload protection

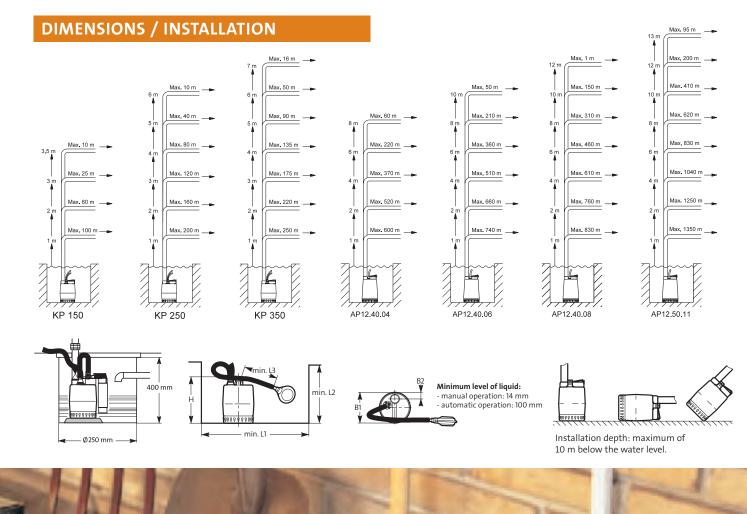
TECHNICAL FEATURES

Pumps	Cable	P2	1 ph	3 ph	Water	Outlet	Outlet Dimensions (mm)				l/min	0	50	100	150	200	300	400	500	
	(m)	(kW)	In (A)	In (A)	temp (°C)		н	B1	11	L2	L3	m³/h	0	3	6	9	12	18	24	30
Unilift KP 150	5	0.14	1.3	no	0/50	1 ¼"F	225	149	350	400	70		5.2	3.9	2.7	-	-	-	-	-
Unilift KP 250	5	0.25	2.2	no	0/50	1 ¼"F	225	149	350	400	70		7.5	6.7	5	2.8	-	-	-	-
Unilift KP 350	5	0.35	3.2	no	0/50	1 ¼"F	235	149	350	410	70		9	7.9	6.7	5.1	2.9	-	-	-
Unilift AP12-40-04	10	0.4	3	1.2	0/55	1½"F	321	216	550	600	100	m Head	10.7	9.6	8.5	7.1	5.4	1.3	-	-
Unilift AP12-40-06	10	0.6	4.4	1.6	0/55	1½"F	321	216	550	600	100		12.9	11.9	10.7	9.2	7.5	3.4	-	-
Unilift AP12-40-08	10	0.8	5.9	2.1	0/55	1 ½"F	346	216	550	600	100		14.5	13.5	12.4	11.1	9.6	5.8	0.8	-
Unilift AP12-50-11	10	1.1	8.5	-	0/55	2"F	357	241	550	600	100		16	15.2	14.3	13.2	12.1	9.5	6.6	3.5
Unilift AP12-50-11	10	1.1	-	3.2	0/55	2"F	357	241	550	600	100		16.7	15.9	15	14	12.9	10.4	7.4	4.2

*70 °C max. for 2 minutes at intervals of at least 30 minutes.



DRAINAGE PUMPS





The AP35 and AP50 pumps are submersible pumps, specially designed for pumping wastewater and domestic sewage or any other non-aggressive liquid containing solid matter up to 50 mm.

They can be used as a fixed or mobile installation, vertically or horizontally (discharge outlet facing up).

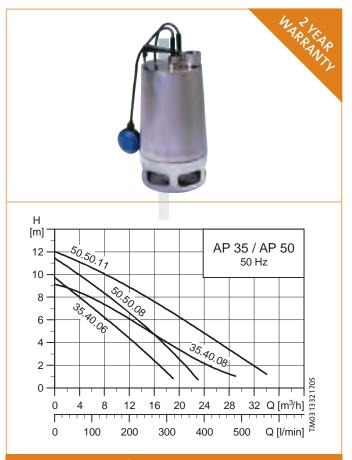
- Lifting domestic wastewater from washing machines, toilets etc
- Draining sumps
- Agricultural and industrial transfer of liquids

FEATURES

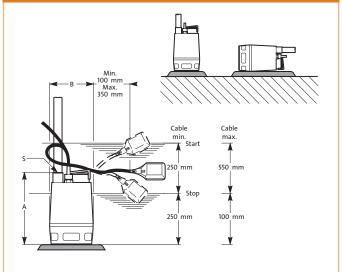
- Single-phase models supplied with float switch
- Motor cooling provided in all conditions by cooling jacket
- Solid handling capacity: 35 mm for AP35 and 50 mm for AP50
- Easy service of power cable and float
- Pumped liquid temperature up to 70 °C, for limited operating period (2 minutes per 30 minute period)

CONSTRUCTION

- Stainless steel volute, pump housing and impeller
- IP68 motor
- Insulation Class F
- Semi-open vortex impeller
- Silicon carbide mechanical seal (AP35)
- Tungsten carbide mechanical seal (AP50)
- Voltage: 1 x 240 V with float switch (A)



DIMENSIONS / INSTALLATION

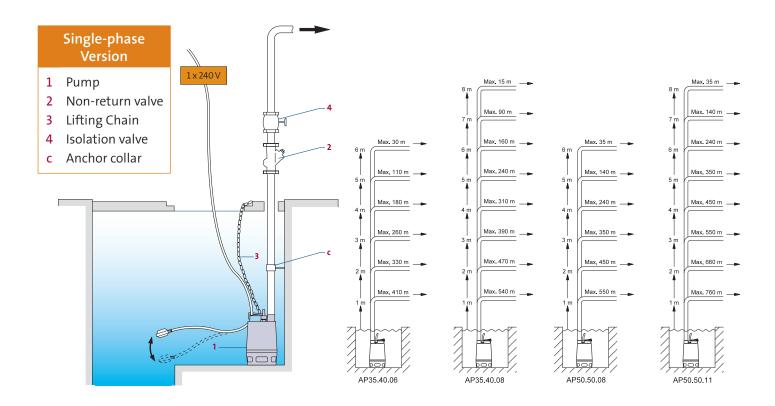


Installation depth: max. 10 m below the water level.

Pumps	Cable	P2	1 ph	Water	Outlet	t Dimensions (mm)		l/min	0	100	200	300	400	500
	(m)	(kW)	In (A)	temp (°C)		A	В	m³/h	0	6	12	18	24	30
Unilift AP35-40-06-A1	10	0.6	4	0/55	1 ½"F	376	216		9.7	7.1	4.4	1.4	-	-
Unilift AP35-40-08-A1	10	0.7	5.5	0/55	1 ½"F	410	216	m Head	11.4	9.2	6.6	3.6	-	-
Unilift AP50-50-08-A1	10	0.8	5.9	0/55	2"F	436	241		9.1	7.9	6.1	4.0	2.2	-
Unilift AP50-50-11-A1	10	1.1	8	0/55	2"F	436	241		11.8	10.2	8.3	6.3	4.2	2.0

TECHNICAL FEATURES







The AP35B and AP50B submersible pumps are specially designed for lifting domestic sewage or any other non-aggressive liquid containing solid matter up to 50 mm.

They can be installed vertically or horizontally.

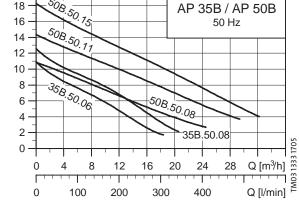
FEATURES

- Single-phase models supplied with float switch and standard electric plug
- Auto Coupling available as an accessory for installation on a guide bar enabling positioning/removal of the pump from outside the hole
- Solid handling capacity: 35 mm for AP35B and 50 mm for AP50B
- Unique clip assembly system enabling immediate access to the impeller without disassembly tools
- Easy service of the power cable and float

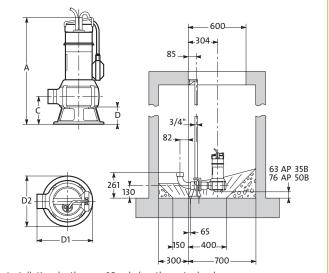
CONSTRUCTION

- Stainless steel volute, pump housing and impeller
- IP68 motor
- Insulation Class F
- Vortex impeller
- Silicon carbide mechanical seal
- Voltage: 1 x 240 V with float switch (A1) or 3 x 415 V





DIMENSIONS / INSTALLATION



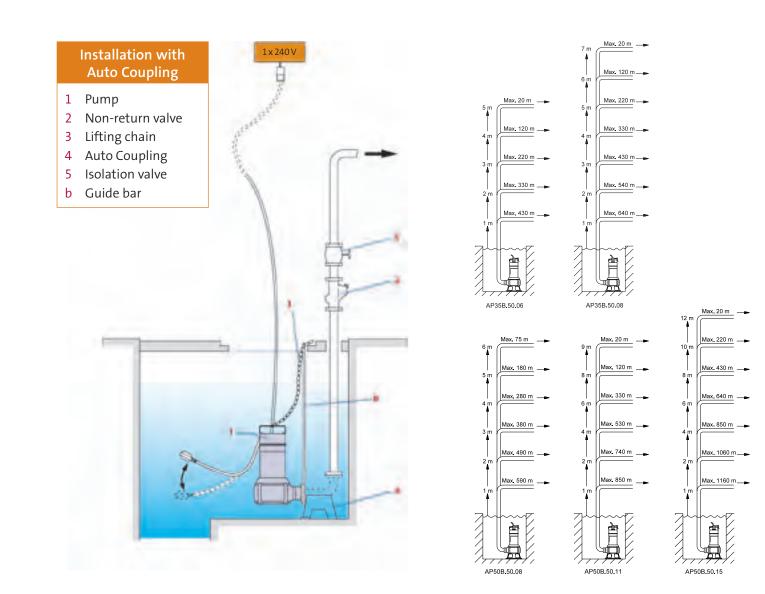
Installation depth: max. 10 m below the water level. In continuous operation the pump must be continuously submersed.

Pumps	Cable	P2	1 ph	3 ph	Water	Outlet	Dimensions (mm)					l/min	0	100	200	300	400	500
	(m)	(kW)	In (A)	In (A)	temp (°C)		A	С	D	d1	d2	m³/h	0	6	12	18	24	30
Unilift AP35B-50-06-A1	10	0.66	4	-	0/40	2"F	443	116	73	234	210		10.5	7.4	4.5	1.7	-	-
Unilift AP35B-50-08-A1	10	0.71	5.5	-	0/40	2"F	468	116	73	234	210		12.5	9.4	6.8	3.4	-	-
Unilift AP50B-50-08-A1	10	0.74	5.4	-	0/40	2"F	443	116	73	234	210	m Head	11.0	8.9	6.7	4.5	2.8	-
Unilift AP50B-50-11-A1	10	1.1	8	-	0/40	2"F	468	116	73	234	210		14.0	11.5	9.5	7.2	4.9	-
Unilift AP50B-50-11-3	5	1.3	-	2.8	0/40	2"F	468	116	73	234	210		14.3	12.1	10.0	7.8	5.5	-
Unilift AP50B-50-15-3	5	1.5	-	3	0/40	2"F	468	116	73	234	210		18.3	15.2	12.8	10.2	7.6	5.0

TECHNICAL FEATURES



EFFLUENT PUMPS







HOT WATER AND HEATING

Beyond Expectations

With over 50 million Grundfos hot water or heating circulators already successfully installed around the world, you can be sure that you're in good company.

Since 1959, Grundfos has developed a series of pumps to suit every conceivable household hot water and heating need - and we continue to be the professionals' first choice pump supplier around the globe.

> Add convenience and save money with heating and hot water circulation solutions from Grundfos. There are solutions for both new and existing homes.

HOUSEHOLD HOT WATER

APPLICATIONS

Home booster: the pump increases the pressure so that the required pressure is available at showers, taps etc for domestic water. The pump is used in open systems and can be connected directly to the water main.

FEATURES

- Easy installation
- Low noise
- Water-cooled system
- Leakage free
- Energy saving
- Space intelligent

CONSTRUCTION

- Stainless steel body
- Built in flow switch

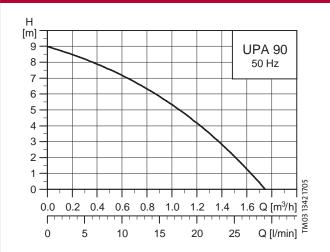


TECHNICAL FEATURES

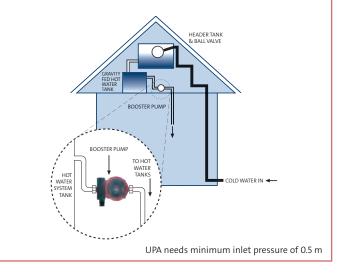
Model		UPA15-90N
Voltage	V	240
P1	W	120
In	А	0.48
Enclosure & Insulation class		IP42/H
Maximum liquid temperature	°C	90
Recommended minimum suction Head	mm	850
Port to port dimension	mm	160
Union set provided		¾"M
Net weight	kg	2.5



PERFORMANCE



INSTALLATION



Selector in pos	ition	The pump
I	Off	is switched off
Ш	Auto	starts and stops automatically
111	Manual*	runs continuously (also if tapping points are turned off

*pin must be removed for access to this setting

Hot Water Recirculation: Grundfos Comfort system ensures that there is always hot water available when it is needed and prevents water wastage resulting from the draining of cold water.

The Grundfos Comfort system uses the cold water supply line as the "return-line" to the water heater. A Comfort pump is used to create a pressure differential that allows the cold water in the hot water supply line to by-pass (at low volume) into the cold supply line through a patented thermostatically controlled valve that is mounted under the sink furthest from the water heater.

Comfort pumps are suitable for solar hot water systems.

FEATURES

- Easy installation
- Instant hot water
- No waste of precious drinking water
- Energy effective pump with the built-in timer and thermostat (BUT model)



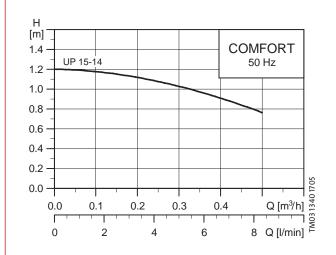
TECHNICAL FEATURES

Comfort system including the Comfort UP15-14 BUT pump (with lead, timer and thermostat) and valve kit										
Voltage	V	240								
P1	w	25								
In	А	0.11								
Enclosure & Insulation class	-	IP42/F								
Pump port to port dimension	mm	80								
Pump connection to pipe	-	½"F								
Valve Connection	-	½"M								
Net weight	kg	1.16								

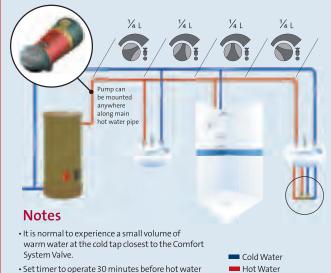


UP15-14 BUT pump with valve kit

PERFORMANCE



INSTALLATION



- demand and adjust thermostat accordingly.
- L Length of hot water pipe



HOUSEHOLD HOT WATER

APPLICATIONS

The UPN circulator Pumps in stainless steel are specifically designed for household hot water systems, and solar hot water applications.

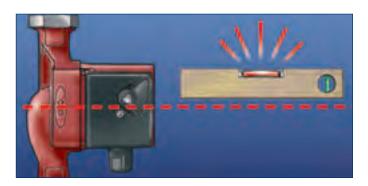
FEATURES

- Meets requirements of AS/NZS 4020 "Testing of products for use in contact with drinking water". No risk to water quality thanks to the main components being stainless steel (pump housing, bearing plate, stator and rotor can (stainless steel AISI 304)
- Interchangeable with most of the installed bronze models (150 mm port to port)
- Especially designed for hot water application UP20-60N model can also be used with chilled water from +2 °C

Model		UP20-60N
Voltage	V	1 x 240
P1	W	90
In	А	0.37
Enclosure & Insulation class		IP44/F
Liquid temperature range	°C	+2 C to +110
Port to port dimension	mm	150
Union set (pn 52-99-82)		¾"F
Net weight	kg	2.8

TECHNICAL FEATURES

INSTALLATION

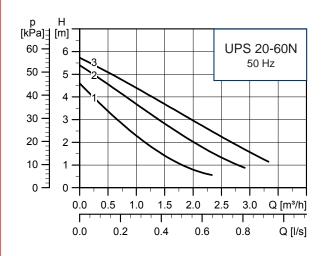




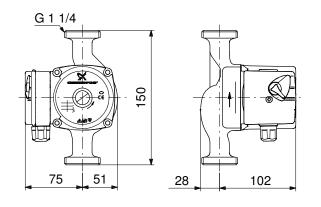
40



PERFORMANCE



DIMENSIONS



The circulator pumps in cast iron pump housing version are specifically designed for heating systems. For underfloor heating systems, it is advisable to use the stainless steel version, type Aphla N and UPS N, as the pumped liquid may often become aerated, causing an ordinary cast iron pump housing to corrode.

FEATURES

- UPS can be operated at three speeds
- ALPHA 2 automatically controls the differential pressure by adjustment of pump performance to the actual heating demand, without the use of external components

TECHNICAL FEATURES

The ALPHA 2 and UPS pumps are of the canned rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid.

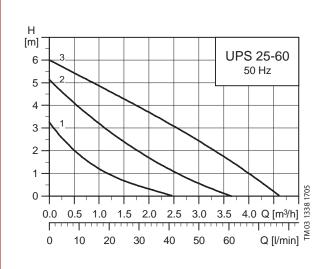
Pumps		UPS25-60	ALPHA 2 25-60
Voltage	V	1 x 240	1 x 240
P1 (max speed)	W	105	90
In	А	0.44	0.40
Enclosure & Insulation class		IP44/F	IP42/F
Liquid temperature range	°C	+2 C to +110	+2 C to +110
Port to port dimension	mm	130 or 180	180
Union set		1"F	1"F
Net weight	kg	2.6	2.6

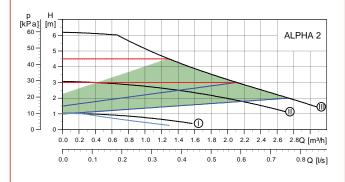
INSTALLATION





PERFORMANCE





GRUNDFOS



HOUSEHOLD B-LINE

Performance,

Quality and Value

s range of high quality and robust pumps are manufactured for use in private dwellings, farms and small industry. Hardwearing materials and reliable design ensures long product life and years of trouble-free operation.

高大生



Ideal for one or multiple tap outlets to your garden, toilet and laundry, the Grundfos JPRain range offers a reliable solution to help you utilise your collected rainwater in the best possible way.

FEATURES

- 3 models: JPRain, JPRain MP, JPRain PT
- Self priming from bore and rainwater tank
- Strong suction capacity
- Automatic on/off switch
- Built in thermal protection
- Suitable for above or underground rainwater tanks
- Handles small sandy impurities with ease

CONSTRUCTION

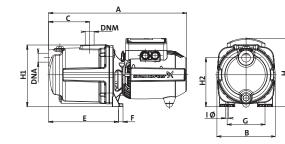
- Technopolymer pump body
- Carbon/ceramic mechanical seal
- AISI 304 stainless steel shaft
- 1 x 240V, IP44 motor
- Insulation Class F, with built-in overload protection

PERFORMANCE

	Disc	harge Pre	ssure (kP a	a /psi) - ba	ised on ze	ero suctio	n lift
	150	200	250	300	350	400	500
	22	29	36	44	51	58	72
Pumps			Ou	itput (l/m	in)		
JPRain 2 PT08	46	39	30	-	-	-	-
JPRain 3 PT18	-	58	40	29	-	-	-
JPRain 4 PT18	-	-	58	44	29	-	-
JPRain 2 MP	40	34	26	-	-	-	-
JPRain 3 MP	-	51	35	26	-	-	-
JPRain 4 MP	-	-	51	39	26	-	-

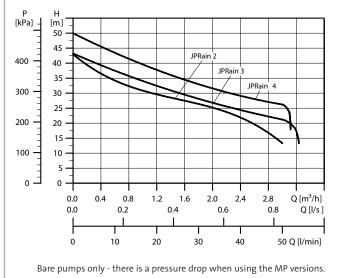
As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute

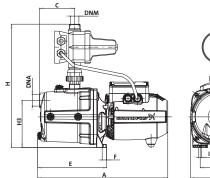
DIMENSIONS













TECHNICAL FEATURES

Dimensions (mm) Pump type Α A1 В С Е G н H3 ١ø DNA F DNM JPRain 2 410 390 178 122 192 14 111 200 144 9 Rp 1 Rp 1 200 410 390 178 122 192 14 111 144 9 JPRain 3 Rp 1 Rp1 JPRain 4 429 409 178 122 197 14 111 213 144 9 Rp 1 Rp1

JPRain The JPRain without any automatic controllers will operate manually by switching the pump on and off at the power point.

JPRain MP The JPRain MP is a complete system which automatically switches on and off according to demand. The controller also has dry run protection to stop the pump if the tank runs dry. When small system leaks are present the MP will prevent cycling of the pump.

Duran tana		Dimensions (mm)											
Pump type	А	В	с	E	F	G	lø	н	H3	DNA	DNM		
JPRain 2 MP	410	212	122	192	14	111	9	360	144	Rp 1	Rp 1		
JPRain 3 MP	410	212	122	192	14	111	9	360	144	Rp 1	Rp 1		
JPRain 4 MP	429	212	122	197	14	111	9	360	144	Rp 1	Rp 1		

JPRain PT The JPRain PT fitted with a pressure switch and tank will start and stop automatically when a tap is opened or closed. The system will draw water from the pressure tank first when only a small amount of water is needed. JPRain PT is supplied with a non-return valve which is to be fitted to the pump inlet.

During from a		Dimensions (mm)											
Pump type	А	В	с	E	F	G	lø	н	H3	DNA	DNM		
JPRain 2 PT	410	212	122	192	14	111	9	570	144	Rp 1	Rp 1		
JPRain 3 PT	410	212	122	192	14	111	9	570	144	Rp 1	Rp 1		
JPRain 4 PT	429	212	122	197	14	111	9	570	144	Rp 1	Rp 1		

Pump type	Voltage (V)	P ₁	P ₂	P ₂	lø	Capacitator		
		Max [kW]	[kW]	[hp]	[A]	[μF]	Vc]	
JPRain 2	1 x 240	0.72	0.44	0.6	3.12	12.5	450	
JPRain 3	1 x 240	0.85	0.60	0.8	3.4	12.5	450	
JPRain 4	1 x 240	1.13	0.75	1.0	4.7	16.0	450	



GENERAL TRANSFER PUMPS

APPLICATIONS

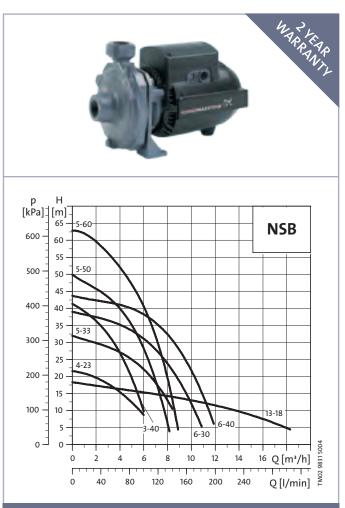
The single phase NSB range are ideally suited for water transfer, pressure boosting, tank filling, wash down applications and reticulation irrigation.

FEATURES

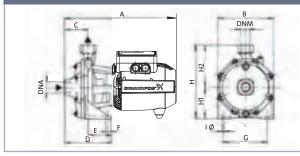
- Wide range single and twin impeller models
- Heavy duty design for long life
- Compact and easily adapted to existing installation
- Easy installation: supplied with lead and plug
- Low noise level, quiet operation

CONSTRUCTION

- Cast iron pump body and motor support treated against corrosion
- Technopolymer impeller. Carbon/ceramic mechanical seal mounted on stainless steel rotor shaft extension
- Motor: Rotor mounted on oversized greased sealed-for-life ball bearing. Built-in thermal and current overload protection
- 1 x 240 V, 50 Hz, 2 poles, 2900 rpm, IP44, Class F



DIMENSIONS



TECHNICAL FEATURES / PERFORMANCE

Pumps	1x24	10V	Water	Conne	Connections Dimensions		(mm)	Weight	Discha			harge Pre	arge Pressure (kPa /psi)				
			temp							100	150	200	250	300	350	400	500
			(°C)							15	22	29	36	44	51	58	72
	P2 (kW)	In (A)		inlet	outlet	Α	В	н	(kg)				Output	(l/min)			
NSB4-23	0.37	3	0/50	1"F	1"F	275	160	205	10.3	92	69	24	-	-	-	-	-
NSB5-33	0.75	6	0/50	1"F	1"F	300	185	235	14.7	-	123	107	84	20	-	-	-
NSB13-18	0.75	4.6	0/50	1½"F	1½"F	312	169	210	14	237	105	-	-	-	-	-	-
NSB3-40	0.75	5.5	0/50	1"F	1"F	342	180	235	16.1	-	90	83	72	55	38	-	-
NSB5-50	1.10	8.3	0/50	1¼"F	1"F	370	210	268	23.3	127	118	112	106	92	82	62	-
NSB5-60	1.85	12.8	0/50	1¼"F	1"F	370	210	268	23.8	-	137	131	123	117	110	100	71
NSB6-30	1.10	7.1	0/50	1½"F	1"F	387	205	233	21.5	172	156	144	127	103	59	-	-
NSB6-40	1.85	9	0/50	1½"F	1"F	461	205	233	25.9	190	178	170	154	140	118	73	-

As a guide 1 tap 👗 = 10 litres per minute • 1 sprinkler 👗 = 15 litres per minute



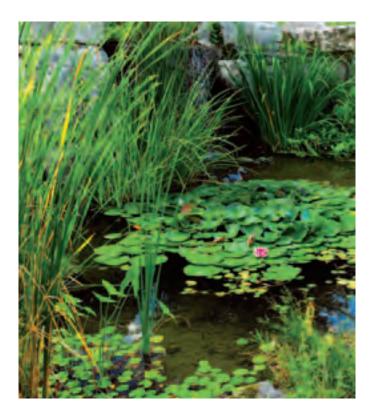
Ideal for emptying ponds, fountains, swimming pools, for pumping water from septic tanks and for drainage jobs in and around home and garden.

FEATURES

- Float switch for automatic pump operation
- Easy to handle
- Built-in thermal protection (1 x 240 V)
- KPB Vortex 330 handles particles up to 25 mm

CONSTRUCTION

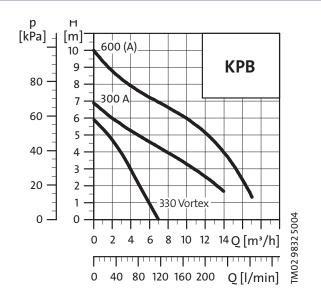
- Technopolymer pump body and impeller
- Submersible motor 1 x 240 V, IP68, Class F, with built-in overload protection and capacitor



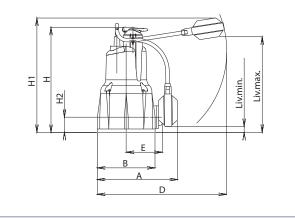
TECHNICAL FEATURES / PERFORMANCE



KPB 600A, KPB300A and KPB Vortex 330



DIMENSIONS



Pumps	Cable	P2	1 ph	Water	Outlet	Outlet Dimensions			Weight	l/min	0	50	100	150	200	250	
	(m)	(kW)	In (A)	temp (°C)		Α	В	D	н	(kg)	m³/h	0	3	6	9	12	15
КРВЗООА	5	0.22	1.5	0/35	1 ¼"F	185	140	225	275	4.5	m/Head	7	5.5	4.6	3.7	2.5	-
KPB600A	5	0.55	3.4	0/35	1¼"F	200	160	225	376	6.7		10	8.3	7.2	6.3	5.2	3.3
KPB Vortex 330	5	0.18	0.9	0/40	1¼"F	205	165	250	300	4.5		6	4	1	-	-	-

47

WHAT PUMP DO	0	I NEED? 1
Application		Household water supply
		Drainage
		Irrigation
		Water transfer
		Other
Water source		Above ground tank
		Underground tank
		River
		Dam
		Other
Power supply		240 V single phase
		415 V three phase
Water requirement	Ηοι	usehold
		House only
		House and garden
		Showers (number)
		Sprinklers (number)
		Sprinklers (type)
		Evaporative airconditioner connected
	Irriş	gation
		Sprinklers (number)
		Sprinklers (type)
		Automatic Operation
		Manual Operation
	Dra	inage and Water transfer
		Lift from pump (A) to point of discharge (B)
Details of existing pipeline		Size (mm)
		Type (Polyethylene/PVC/Copper/Steel)
		Length (m)

HOW MUCH FLOW (Q)? 2					
Water pressure systems	V				
Weekend cottage		10 to 20 L/min			
Small home		20 to 30 L/min			
Average home		30 to 50 L/min			
Large home		50 to 90 L/min			
Average water consumption	No.				
Standard shower head		15 L/min			
Water saving shower head		6-7 L/min			
Household standard tap		10-15 L/min			
Tap with aerator or flow restrictor		4-6 L/min			
Lawn sprinkler		10-15 L/min			
Drainage and effluent		See your Grundfos dealer			

CALCULATE THE FLOW RATE

Q = () L/min



4

HOW MUCH PRESSURE (P)?

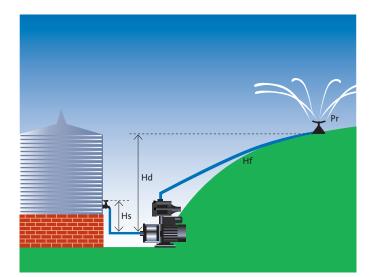
P = Pump Head

Hd = Height difference between the pump and the highest point of use

Hs = Pressure already available at the pump level (tank example with positive suction head). If you pump water under the level of the pump (well, river, underground tank), contact your Dealer in order to calculate the suction lift and to select the right pump.

Hf = Friction loss or pipe resistance to water flow (see chart at right for Poly Pipe friction loss)

Pr = Residual pressure, i.e. the required pressure at the tap, shower or sprinkler. As a guide, shower head, standard ½" tap or sprinkler requires approx. 150 kPa (15 m or 21 psi)



	Flow Rate	2	Friction loss - PN12.5 High Density Polyethylene pipe (m/100 metres of pipe)					
L/min	m ³ /hr	L/sec	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
12	0.7	0.2	10.9	3.7	1.1	0.4	0.1	-
24	1.4	0.4		13.4	3.9	1.3	0.4	0.1
36	2.2	0.6			8.3	2.8	0.9	0.3
48	2.9	0.8			14.2	4.8	1.6	0.5
60	3.6	1				7.2	2.4	0.8
72	4.3	1.2				10.1	3.3	1.1
84	5.0	1.4				13.5	4.4	1.5
96	5.8	1.6					5.7	1.9
108	6.5	1.8					7.1	2.3
120	7.2	2					8.6	2.8

CALCULATE THE PRESSURE					
P = () Hd - () Hs + () Hf + () Pr	

Example

Q (Flow rate) = 60 L/min = 4 (sprinklers) x 15 L/min

Hs = 2 m

Hd = 15 m

Hf = 3.6 m

(50 m of 40 mm Poly Pipe - see Friction Loss Chart above) Pr = 15 m (150 kPa)

P = 15 - 2 + 3.6 + 15 = 31.6 m = 310 kPa = 44 psi

USEFUL CONVERSION								
То	Flow Conversion							
From		litres per minute		litres per second		cubic metres per hour		gallons per min
1 L/min	=	1	=	0.017	=	0.06	=	0.22
1 m ³ /hr	=	16.7	=	0.28	=	1	=	3.7
1 L/sec	=	60	=	1	=	3.6	=	13.2
1 gpm	=	4.5	=	0.076	=	0.27	=	1
Example								
60 L/min	=	60 L/min	=	1 L/sec	=	3.6 m ³ /h	=	13.2 gpm
То	To Pressure Conversion							
From		metres of head		kilopascal		pounds/inch ²		bar
1 m	=	1	=	9.8	=	1.4	=	0.1
1 kPa	=	0.1	=	1	=	0.14	=	0.01
1 psi	=	0.7	=	6.9	=	1	=	0.07
1 bar	=	10.2	=	100	=	14.5	=	1
Example								
200 kpa	=	20 m	=	200 kPa	=	28 psi	=	2 bar

USEFUL CONVERSION

49

Ν	O^{-}	TΕ	S
		• -	<u> </u>

50	



Grundfos Pumps Pty Ltd 515 South Road Regency Park SA 5010 Australia Phone (08) 8461 4611 Fax (08) 8340 0155 contact-au@grundfos.com

Grundfos Pumps NZ Ltd 17 Beatrice Tinsley Crescent Albany, North Shore City 0632 New Zealand Phone (09) 415 3240 Fax (09) 415 3250 contact-nz@grundfos.com

www.grundfos.com.au

The name Grundfos, the Grundfos logo, and the payoff Be-Think-Innovate are registrated trademarks owned by Grundfos Management A/S or Grundfos A/S, Denmark. All rights reserved worldwide.

