



**HOME &**

**GARDEN RANGE**

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\*Local legislation may prohibit direct Mains Boosting or require the use of a Break Tank. Permits may need to be sought.

# HOME PRESSURE SYSTEMS

The Grundfos Home Pressure System range provides a complete selection of pumps for the supply and pressure boosting of rainwater, whether it's for whole of home supply or garden irrigation. Grundfos also have solutions for mains boosting\* if you are experiencing poor mains pressure.



## RANGE AT A GLANCE

	 SCALA2 Page 6	 CM Booster Self-Priming Page 12	 SCALA1 Page 14	 Jet Pump Range Page 20	 CME Booster/ CME TWIN Booster Page 8/10	 CM Booster Page 16	 CM Booster Pressure Switch Page 18
Water Source	 Above Pump Level  Below Pump Level  Mains Water*			 Above Pump Level  Mains Water*			
Application	 Household Water  Irrigation  Mains Boosting*						
Self-Priming	●	●	●	●			
Max. Suction Lift	8 m	4 m (8 m with foot valve)	8 m	8 m	1 m (with foot valve)	1 m (with foot valve)	1 m (with foot valve)
Max. Noise dB(A)	47 dB	55 dB	55 dB	81 dB	55 dB	55 dB	55 dB
Max. number of open taps	4 Taps	7 Taps	5 Taps	5 Taps	7 Taps	7 Taps	7 Taps
Max. number of storeys	Double Storey Home	Multi-Storey Home	Multi-Storey Home	Double Storey Home	Multi-Storey Home	Multi-Storey Home	Multi-Storey Home
Wetted Materials	Composite	Stainless Steel	Composite	Composite/ Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Auto Start/Stop	Integrated	PM1/PM2	Integrated	PM1 (JP-PM) Pressure Switch (JP-PT)	Pressure Sensor	PM1	Pressure Switch
Anti-Cycling/ Leak Detection	Integrated	PM1/PM2	Integrated	PM1 (JP-PM)		PM1	

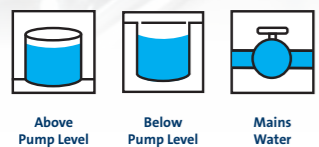
\*Local laws or legislation may prohibit Mains Boosting

# SCALA2

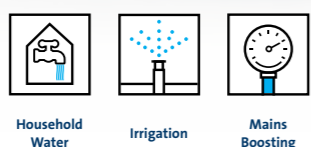
ALL-IN-ONE, SELF-PRIMING BOOSTER WITH INVERTER TECHNOLOGY



## WATER SOURCE



## APPLICATION



The Grundfos SCALA2 is an intelligent, self-priming pump with inverter technology that adjusts its performance according to household water demand, eliminating pressure fluctuations and resulting in lower running costs.

- **Perfect pressure to all taps** - Inverter technology (variable speed) adjusts motor speed according to demand to deliver perfect pressure to all taps
- **For water sources below pump level** - Designed with good suction lift capabilities, the SCALA2 is able to draw water up to 8 metres vertically below the level of the pump
- **Whisper quiet operation** - Super quiet operation that won't disturb your family or neighbours
- **All-in-one construction** - Tough, weather resistant outer casing houses the pump, motor and the controller
- **Easy installation – plug & pump** - Simply connect the pump inlet and outlet to the pipework, prime the pump, plug into a power outlet and you're ready to pump
- **One-touch pressure adjustment** - The intuitive and intelligent control panel allows for simple adjustment of the pressure to the taps



## PUMP NOISE

SCALA2	CM Booster Self-Priming	CME Booster	Jet Pump Range
47 dB Max.	55 dB Max.	55 dB Max.	70 dB

## PUMP SIZING

High pressure for double storey dwellings and long runs of pipe	SCALA2 3-45	
Adequate pressure for most single storey dwellings	Small House 2-3 taps	Medium House 3-4 taps

Taps are 15 l/min at 22.5 m head

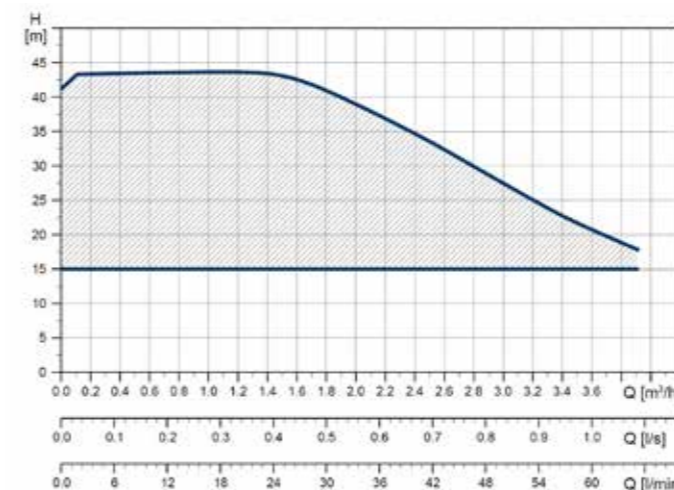
## PROTECTION & CONTROL\*

	SCALA2
Auto Start/Stop	✓
Non-Return Valve	✓
Dry Run Protection	✓
Anti-Cycling Protection	✓
Alarm Indication LED	✓
Temperature LED	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



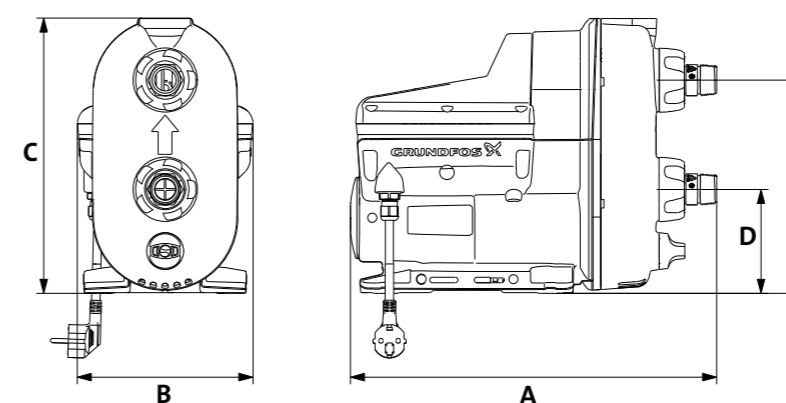
### OPERATING CONDITIONS

Ambient Temperature	0°C to +55°C
Liquid Temperature	0°C to +45°C
Operating Pressure	Max. 10 bar
Sound Pressure	Max. 47 dB

### TECHNICAL DATA

Power Supply Voltage	200-240 Volt, 50 Hz
Power Supply Cable	2 m with plug
Enclosure Class	Suitable for outdoor installation (IPX4D)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



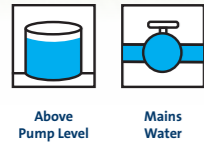
Model	Power (kW) P1 / P2	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
SCALA2	0.55 / 0.45	1" Male	1" Male	403	193	302	114	234	9

# CME BOOSTER

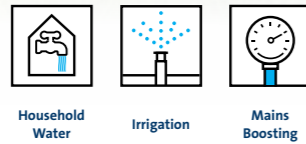
INDUSTRIAL QUALITY PRESSURE BOOSTER WITH INVERTER TECHNOLOGY



## WATER SOURCE



## APPLICATION



The Grundfos CME Booster is an industrial quality, intelligent inverter pump that adjusts its performance constantly according to household water demand, eliminating pressure fluctuations and resulting in lower running costs.

- **Perfect pressure to all taps** - Inverter technology (variable speed) adjusts motor speed according to demand to deliver perfect pressure to all taps
- **Low running costs** - High efficiency motor keeps energy consumption down and running costs low
- **Industrial quality** – Designed and built to suit industrial applications, so easily handles larger domestic water supply or mains boosting applications
- **Quiet operation** - Very quiet operation that won't disturb your family or neighbours
- **Superior materials** - Constructed of high quality industrial grade components. All parts in contact with water are made from 304 stainless steel.
- **Reduced pump start/stops** - The inbuilt pressure tank (2l) minimises pump start/stop frequency
- **One-touch pressure adjustment** - The intuitive and intelligent control panel allows for simple adjustment of pressure to the taps



## PUMP NOISE

SCALA2	CM Booster Self-Priming	CME Booster	Jet Pump Range
47 dB Max.	55 dB Max.	55 dB Max.	70 dB

## PUMP SIZING

Higher pressure for multi-level dwellings and long runs of pipe	CMBE 1-44	CMBE 1-44	CMBE 3-62	CMBE 5-62
High pressure for double storey dwellings and long runs of pipe	CMBE 1-44	CMBE 1-44	CMBE 3-62	CMBE 5-62
Adequate pressure for most single dwellings	CMBE 1-44	CMBE 1-44	CMBE 3-62	CMBE 5-62
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps	Large House + Irrigation 5-7 Taps

Taps are 15 l/min at 22.5 m head

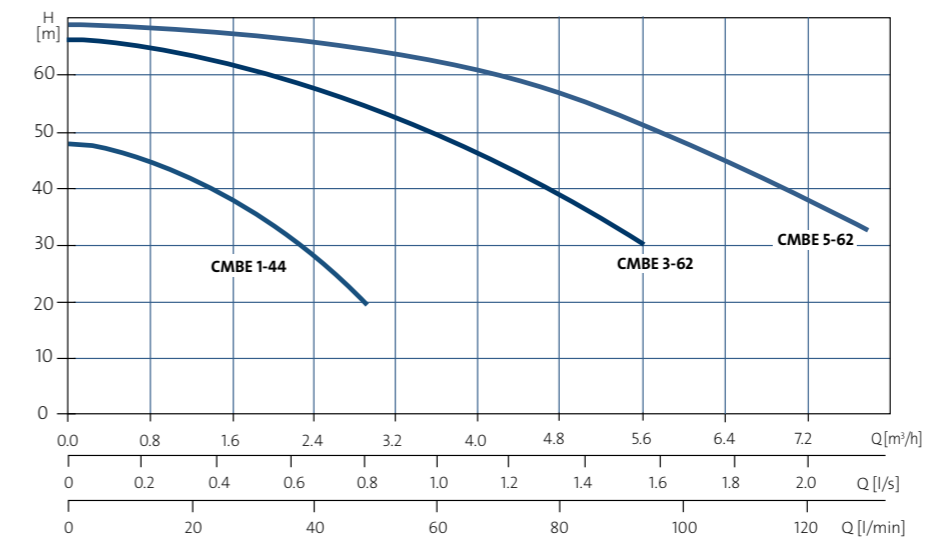
## PROTECTION & CONTROL\*

	CME Booster
Auto Start/Stop	✓
Non-Return Valve	✓
Dry Run Protection	✓
Adjustable Start Pressure	✓
Alarm Indication LED	✓
Pressure Gauge	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



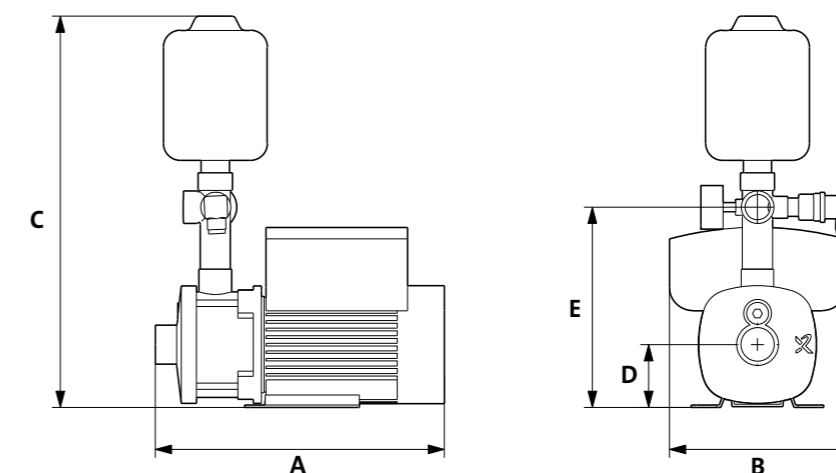
### OPERATING CONDITIONS

Ambient Temperature	0°C to +55°C
Liquid Temperature	0°C to +60°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 55 dB

### TECHNICAL DATA

Power Supply Voltage	200-240 Volt, 50 Hz
Power Supply Cable	1.5 m with plug
Enclosure Class	Undercover installation recommended (IP55)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



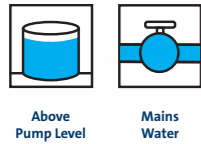
Model	Power (kW) P2	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
CMBE 1-44	0.55	1" Female	1" Female	326	217	440	75	200	16
CMBE 3-62	1.10	1" Female	1" Female	344	217	440	75	200	17
CMBE 5-62	1.50	1 ¼" Female	1" Female	350	217	455	90	215	17

# CME TWIN BOOSTER

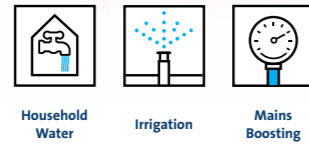


INDUSTRIAL QUALITY PRESSURE BOOSTER WITH INVERTER TECHNOLOGY

## WATER SOURCE



## APPLICATION



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos CME Twin Booster consists of two CME Booster pumps mounted side-by-side on a common base plate, greatly increasing the performance range over a single CME pump and providing back-up in critical applications.

- **Perfect pressure to all taps** - Inverter technology (variable speed) adjusts motor speed according to demand to deliver perfect pressure to all taps
- **Low running costs** - Highest efficiency motor keeps energy consumption and running costs low.
- **For larger multi-dwelling projects** - Designed to suit large multi-storey and multi-dwelling projects
- **Quiet operation** - Very quiet operation that won't disturb your family or neighbours
- **Superior materials** - Constructed of high quality industrial grade components. All parts in contact with water are made from 304 stainless steel.
- **Reduced pump start/stops** - The inbuilt pressure tank (2l) minimises pump start/stop frequency
- **One-touch pressure adjustment** - The intuitive and intelligent control panel allows for simple adjustment of the pressure to the taps



## PUMP NOISE

SCALA2	CM Booster Self-Priming	CME Twin Booster	Jet Pump Range
47 dB Max.	55 dB Max.	55 dB Max.	70 dB

## PROTECTION & CONTROL\*

	CME Twin Booster
Auto Start/Stop	✓
Non-Return Valve	✓
Dry Run Protection	✓
Adjustable Start Pressure	✓
Alarm Indication LED	✓
Pressure Gauge	✓

## ACCESSORIES

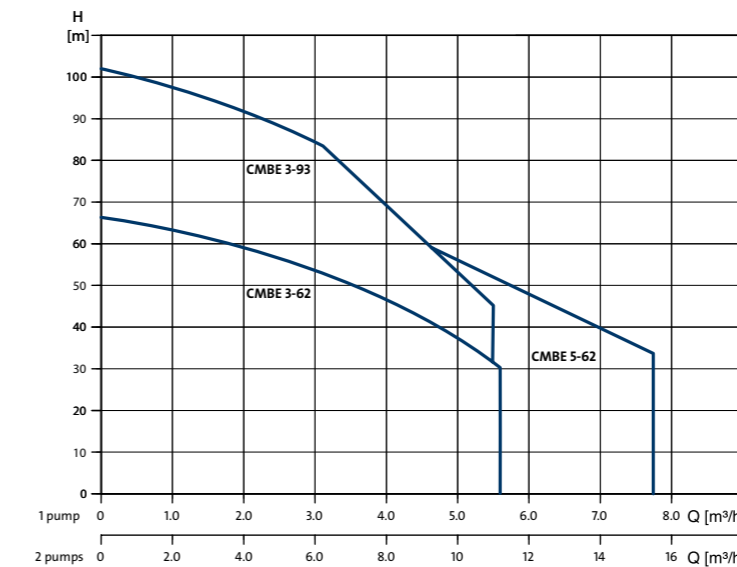
Connection kit includes 40 mm pipework, suction and discharge manifolds and is supplied complete with isolation ball valves, non return valves on suction and barrel unions for quick connection.



\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



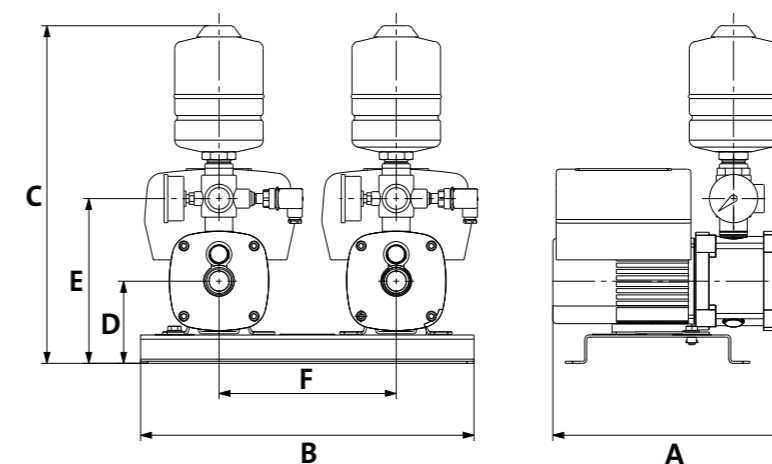
### OPERATING CONDITIONS

Ambient Temperature	0°C to +55°C
Liquid Temperature	0°C to +60°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 55dB

### TECHNICAL DATA

Power Supply Voltage	200-240 Volt, 50 Hz
Power Supply Cable	2 x 1.5 m with plug
Enclosure Class	Undercover installation recommended (IP55)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



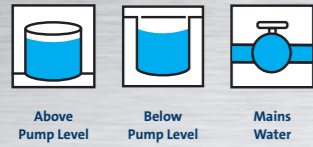
Model	Power (kW) P2	Connections		Dimensions (mm)						Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	F	
CMBE TWIN 3-62	1.10	1" Female	1" Female	344	475	485	110	235	344	40
CMBE TWIN 3-93	1.50	1" Female	1" Female	404	475	495	125	250	404	44
CMBE TWIN 5-62	1.50	1 1/4" Female	1" Female	350	475	495	125	250	350	45

# CM BOOSTER SELF-PRIMING

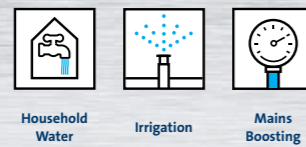


INDUSTRIAL QUALITY, SELF-PRIMING PRESSURE BOOSTER

## WATER SOURCE



## APPLICATION



The Grundfos CM Booster Self-Priming is an industrial quality pump designed for delivering rainwater or boosting mains water pressure into the home from above or below ground tanks.



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- For water sources above or below pump level** - Designed with good suction lift capabilities, the CM Booster Self-Priming is able to draw water up to 4 metres vertically below the level of the pump (up to 8 metres with the installation of a foot valve)
- Automated control and ongoing protection** - The robust Pressure Manager controller features the highest level of customisable protection and automated pump control
- Industrial quality** - Designed and built to suit industrial applications, so easily handles larger domestic water supply or mains boosting tasks
- Quiet operation** - Very quiet operation that won't disturb your family or neighbours
- Superior materials** - Constructed of high quality industrial grade components. All parts in contact with water are constructed from 304 stainless steel.
- Easy installation - plug & pump** - Simply connect the pump inlet and outlet to the pipework, prime the pump, plug into a power outlet and you're ready to pump

## PUMP NOISE

Model	CM Booster Self-Priming	CME Booster	Jet Pump Range
SCALA2	55 dB Max.	55 dB Max.	70 dB

## PUMP SIZING

Pressure Requirement	CMB-SP 3-56	CMB-SP 3-56	CMB-SP 5-47	CMB-SP 5-47
Higher pressure for multi-level dwellings and long runs of pipe	CMB-SP 3-47 1-36	CMB-SP 3-47 3-37	CMB-SP 5-47	CMB-SP 5-47
High pressure for double storey dwellings and long runs of pipe	CMB-SP 1-36	CMB-SP 3-28	CMB-SP 5-28	CMB-SP 5-28
Adequate pressure for most single storey dwellings	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps	Large House + Irrigation 5-7 Taps

Taps are 15 l/min at 22.5 m head

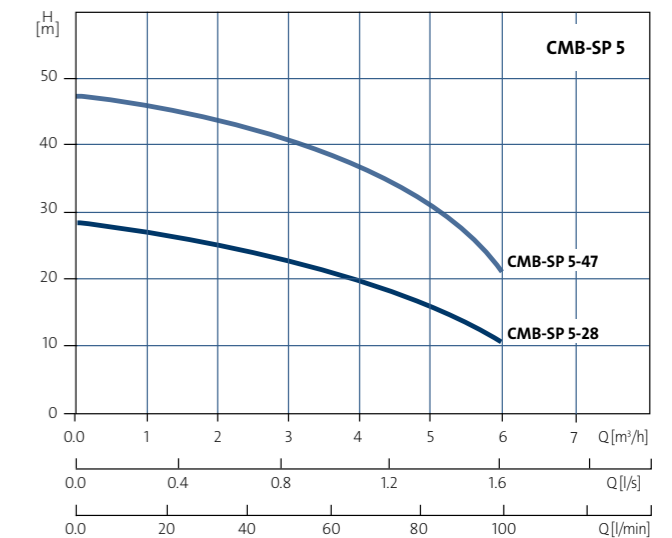
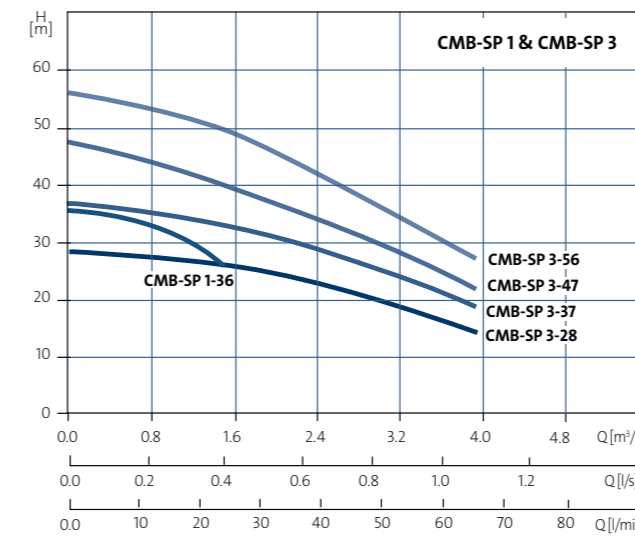
## PROTECTION & CONTROL\*

Feature	CMB-SP with PM1	CMB-SP with PM2
Auto Start/Stop	✓	✓
Non-Return Valve	✓	✓
Dry Run Protection	✓	✓
Anti-Cycling Protection	✓	✓
Alarm Indication LED	✓	✓
Max. Continuous Run Time (30 Mins)		✓
Adjustable Start Pressure		✓
Pressure Indicator		✓
Automatic Restart		✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



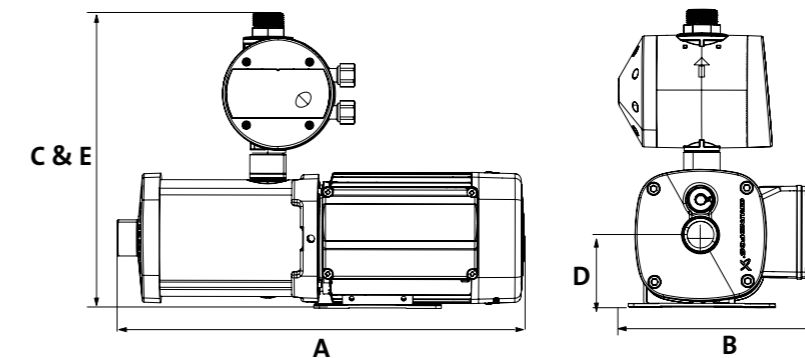
### OPERATING CONDITIONS

Ambient Temperature	-20°C to +55°C
Liquid Temperature	0°C to +60°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 55 dB

### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	1.2 m with plug
Enclosure Class	Undercover installation recommended (IP55)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



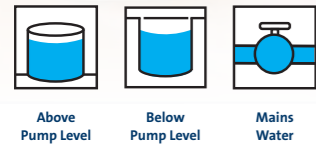
Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet (PM)	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
CMB-SP 1-36	0.50	1" Female	1" Male	377	158	317	75	317	15
CMB-SP 3-28	0.50	1" Female	1" Male	377	158	317	75	317	15
CMB-SP 3-37	0.50	1" Female	1" Male	377	158	317	75	317	15
CMB-SP 3-47	0.50	1" Female	1" Male	413	158	317	75	317	16
CMB-SP 3-56	0.67	1" Female	1" Male	453	158	317	75	317	17
CMB-SP 5-28	0.50	1" Female	1" Male	377	158	317	75	317	15
CMB-SP 5-47	0.90	1" Female	1" Male	453	158	317	75	317	18

# SCALA1

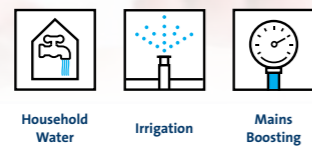


ALL-IN-ONE, SELF-PRIMING BOOSTER WITH BLUETOOTH® CONNECTIVITY

## WATER SOURCE



## APPLICATION



The Grundfos SCALA1 is an all-in-one, self-priming pump with built-in Bluetooth® connectivity, making it simple to install, customise, control and troubleshoot using the Grundfos GO App.



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SCALA1 Twin Booster with manifold and base plate

- **For water sources below pump level** - Designed with good suction lift capabilities, the SCALA1 is able to draw water up to 8 metres vertically below the level of the pump
- **Quiet operation** - Super quiet operation that won't disturb your family or neighbours
- **All-in-one construction** - Tough, weather resistant outer casing houses the pump, motor and the controller
- **Easy installation – plug & pump** - Simply connect the pump inlet and outlet to the pipework, prime the pump, plug into a power outlet and you're ready to pump
- **Simple to operate and monitor** - Seamlessly connect to your SCALA1 using the Bluetooth connected Grundfos GO App.
- **Twin Booster** - For higher flow demand SCALA1 can be easily be setup as a twin booster. Duty assist and duty standby modes available. Base plate, manifolds, communication cable and fixing screws available as an accessory kit.

## PUMP NOISE

Model	SCALA2	SCALA1	Jet Pump Range
Max. Noise	47 dB Max.	55 dB Max.	70 dB Max.

## PUMP SIZING

Pressure Requirement	SCALA1 3-35	SCALA1 3-35	SCALA1 5-55
Higher pressure for multi-level dwellings and long runs of pipe			SCALA1 5-55
High pressure for double storey dwellings and long runs of pipe	SCALA1 3-35	SCALA1 3-35	SCALA1 5-55
Adequate pressure for most single storey dwellings	SCALA1 3-35	SCALA1 3-35	SCALA1 5-55
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps

Taps are 15 l/min at 22.5 m head

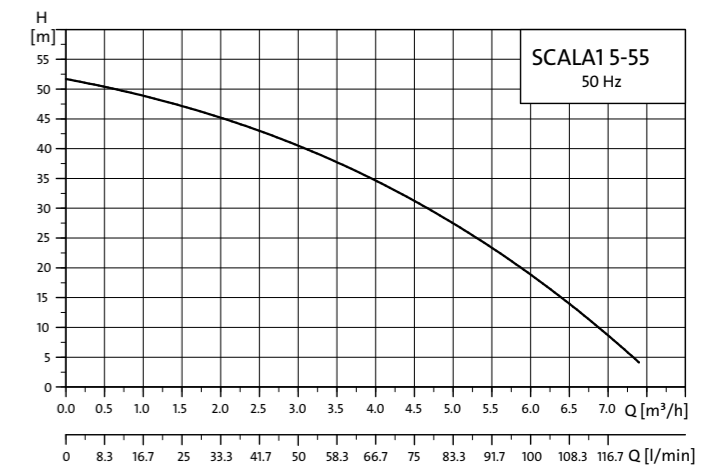
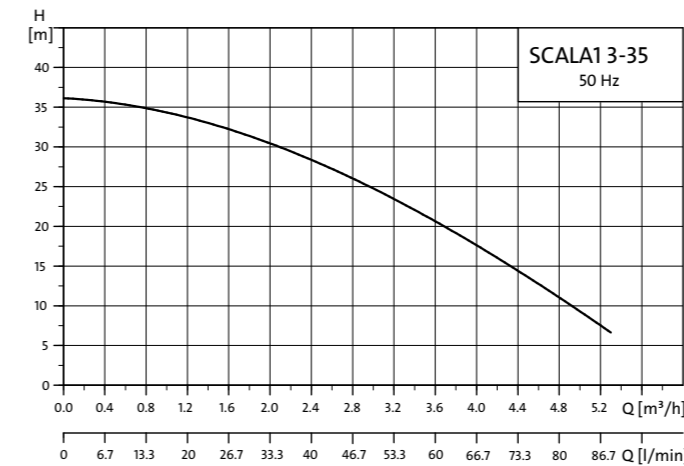
## PROTECTION & CONTROL\*

Feature	SCALA1
Auto Start/Stop	✓
Non-Return Valve	✓
Dry Run Protection	✓
Anti-Cycling Protection	✓
Alarm Indication LED	✓
Grundfos GO Bluetooth® connectivity	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



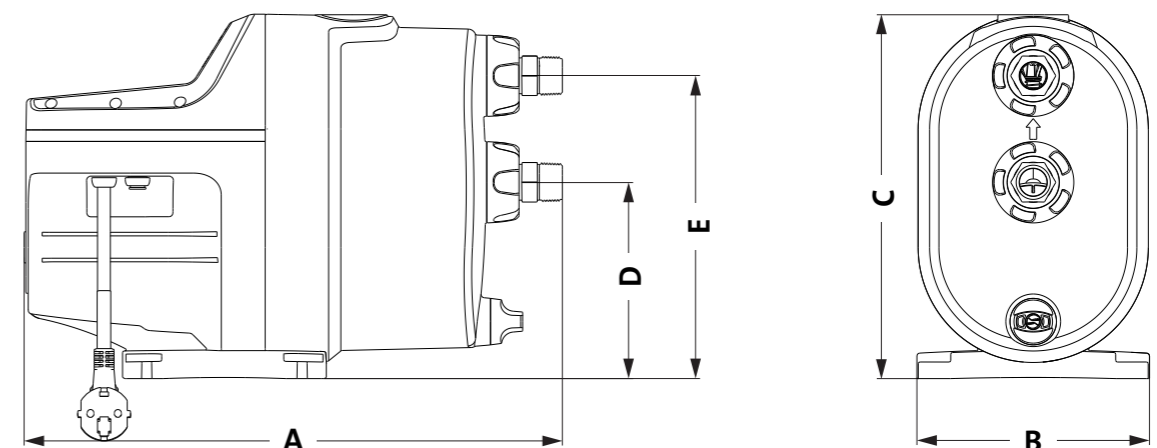
### OPERATING CONDITIONS

Ambient Temperature	0°C to +55°C
Liquid Temperature	0°C to +45°C
System Pressure	Max. 8 bar
Sound Pressure	Max. 55 dB

### TECHNICAL DATA

Power Supply Voltage	230 Volt, 50 Hz
Power Supply Cable	1.5 m with plug
Enclosure Class	Suitable for outdoor installation (IPX4D)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



Model	Power (kW) P1 / P2	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
SCALA1 3-35	0.72 / 0.45	1" Male	1" Male	466	202	316	171	263	12
SCALA1 5-55	1.20 / 0.78	1" Male	1" Male	466	200	316	171	263	14

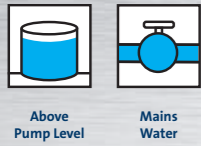


# CM BOOSTER

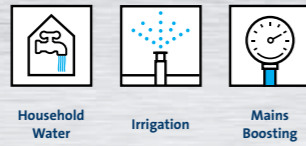
## DOMESTIC PRESSURE BOOSTER



### WATER SOURCE



### APPLICATION



The Grundfos CM Booster is designed for delivering rainwater or boosting mains water pressure into the home from above ground tanks.

- **Automated control and ongoing protection** - The robust Pressure Manager controller provides a basic level of pump control and protective features
- **Industrial quality** - Designed and built to suit industrial applications, so easily handles larger domestic water supply or mains boosting tasks
- **Quiet operation** - Very quiet operation that won't disturb your family or neighbours
- **Easy installation – plug & pump** - Connect the pump inlet and outlet to the pipework, prime the pump, plug into a power outlet and you're ready to pump
- **Heavy duty construction** - Constructed from heavy duty cast iron and stainless steel components



### PUMP NOISE

Model	SCALA2	CME Booster	CM Booster	Jet Pump Range
Max. Noise	47 dB Max.	55 dB Max.	55 dB Max.	70 dB Max.

### PUMP SIZING

Application	CM Booster 1-36	CM Booster 3-37	CM Booster 5-46	CM Booster 5-46
Higher pressure for multi-level dwellings and long runs of pipe			CM Booster 5-46	CM Booster 5-46
High pressure for double storey dwellings and long runs of pipe	CM Booster 1-36	CM Booster 3-37	CM Booster 5-46	CM Booster 5-46
Adequate pressure for most single storey dwellings	CM Booster 1-36	CM Booster 3-37	CM Booster 5-46	CM Booster 5-46
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps	Large House + Irrigation 5-7 Taps

Taps are 15 l/min at 22.5 m head

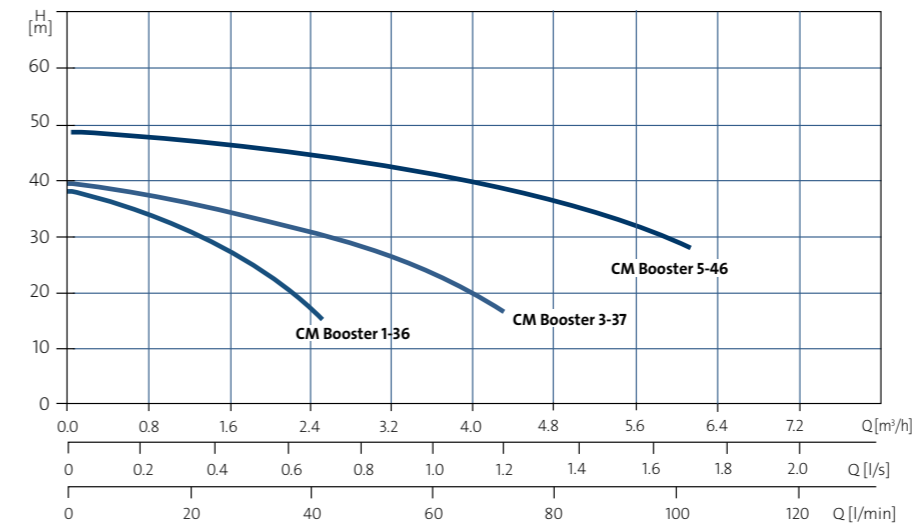
### PROTECTION & CONTROL\*

Feature	CM Booster with PM1
Auto Start/Stop	✓
Non-Return Valve	✓
Dry Run Protection	✓
Anti-Cycling Protection	✓
Alarm Indication LED	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



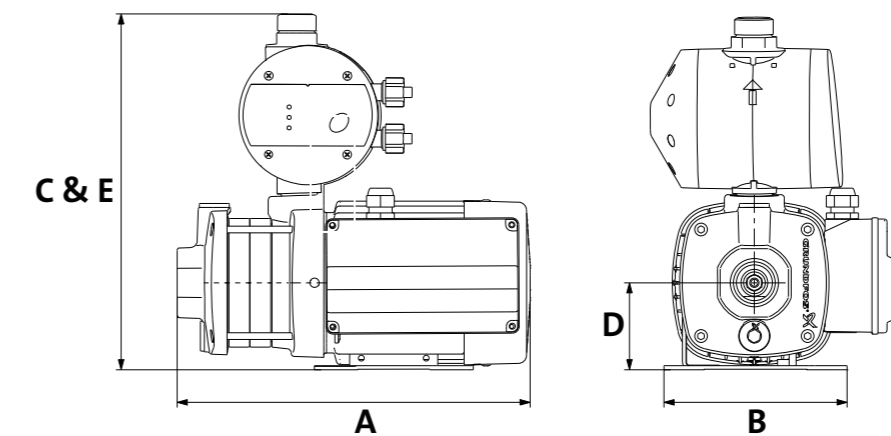
### OPERATING CONDITIONS

Ambient Temperature	0°C to +55°C
Liquid Temperature	0°C to +60°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 55dB

### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	1.2 m with plug
Enclosure Class	Undercover installation recommended (IP55)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



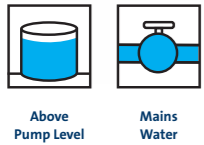
Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
CMB 1-36	0.50	1" Female	1" Male	323	158	301	75	301	14
CMB 3-37	0.50	1" Female	1" Male	323	158	301	75	301	14
CMB 5-46	0.90	1 1/4" Female	1" Male	381	158	301	75	301	15

# CM BOOSTER PRESSURE SWITCH

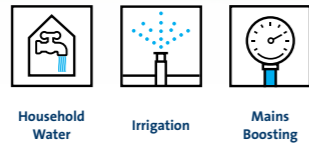


DOMESTIC AND LIGHT INDUSTRIAL PRESSURE BOOSTER WITH PRESSURE SWITCH

## WATER SOURCE



## APPLICATION



The Grundfos CM Booster Pressure Switch is designed for delivering rainwater or boosting mains water pressure in larger domestic, light industrial or commercial applications.

- Industrial quality** - Designed and built to suit industrial applications, so easily handles larger domestic water supply or mains boosting tasks
- Quiet operation** - Very quiet operation that won't disturb your family or your neighbours
- Basic start/stop control built-in** - Comes with a five way valve, pressure gauge, pressure switch and incorporated non-return valve
- Superior materials** - Constructed of high quality industrial grade components. All parts in contact with water are made from 304 stainless steel
- Reduced pump start/stops** - The addition of a pressure tank minimises pump start/stop frequency for reduced noise and increased comfort



## PUMP NOISE

SCALA2	CME Booster	CM Booster Pressure Switch	Jet Pump Range
47 dB Max.	55 dB Max.	55 dB Max.	70 dB Max.

## PROTECTION & CONTROL\*

	CM Booster Pressure Switch
Non-Return Valve	✓
Pressure Gauge	✓
Auto Start/Stop by Pressure Switch	✓

## PUMP SIZING

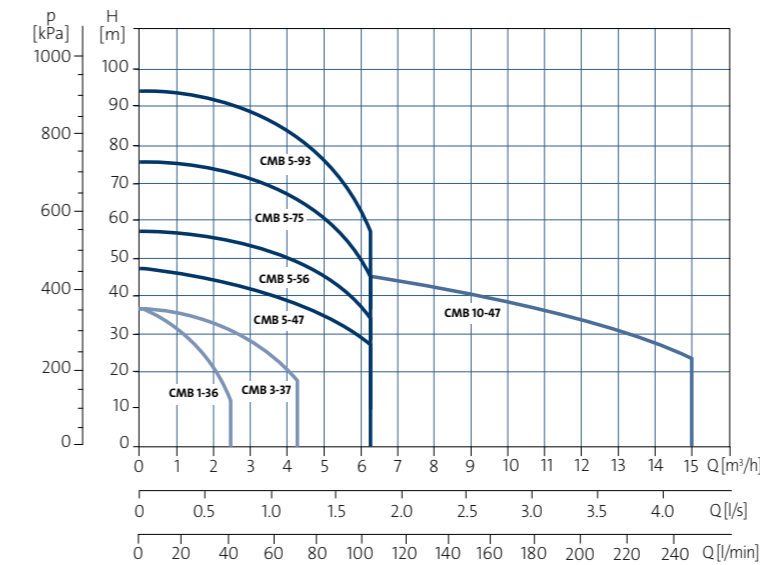
	CM-PS 1-36	CM-PS 3-37	CM-PS 5-47	CM-PS 5-47	CM-PS 5-47
Higher pressure for multi-level dwellings and long runs of pipe			CM-PS 5-47	CM-PS 5-47	CM-PS 5-47
High pressure for double storey dwellings and long runs of pipe	CM-PS 1-36	CM-PS 3-37	CM-PS 5-47	CM-PS 5-47	CM-PS 5-47
Adequate pressure for most single storey dwellings	CM-PS 1-36	CM-PS 3-37	CM-PS 5-47	CM-PS 5-47	CM-PS 5-47
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps	Large House + Irrigation 5-7 Taps	

Taps are 15 l/min at 22.5 m head

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



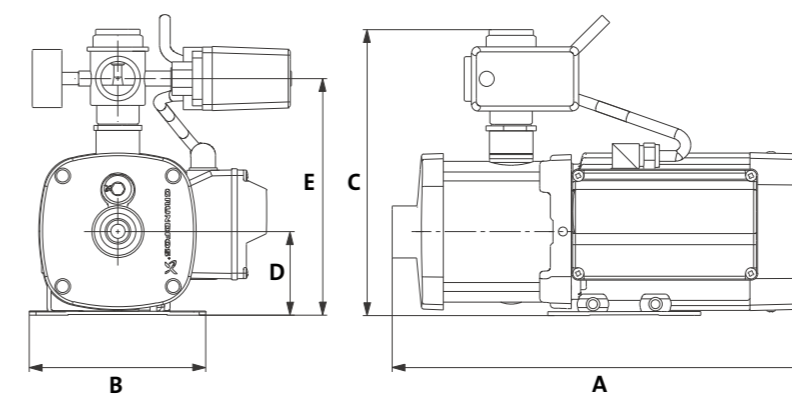
### OPERATING CONDITIONS

Ambient Temperature	-20°C to +50°C
Liquid Temperature	0°C to +60°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 55 dB

### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	1.5 m with plug (1.90 kW version has 15 Amp plug)
Enclosure Class	Requires covered installation (IP44)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
CMB 1-36	0.50	1" Female	1" Female	323	158	255	75	208	14
CMB 3-37	0.50	1" Female	1" Female	323	158	255	75	208	14
CMB 5-47	0.90	1 1/4" Female	1" Female	381	158	255	75	208	17
CMB 5-56	1.30	1 1/4" Female	1" Female	469	178	270	90	223	24
CMB 5-75	1.30	1 1/4" Female	1" Female	505	178	270	90	223	24
CMB 5-93	1.90	1 1/4" Female	1" Female	539	178	270	90	223	27
CMB 10-47	1.90	1 1/4" Female	1 1/2" Female	450	199	323	100	261	30

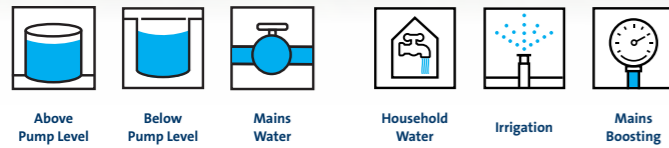
# JET PUMP RANGE

Approved for Drinking Water AS/NZS 4020

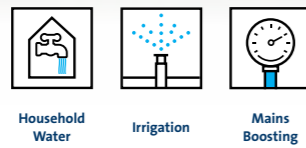
2 YEAR WARRANTY

DOMESTIC SELF-PRIMING JET PUMP

## WATER SOURCE



## APPLICATION



JP Pump Only



JP PT Jet Pump with pressure tank and switch



JP PM Jet Pump with Pressure Manager controller

The Grundfos Jet Pump range comprises three configurations, all built on the robust self-priming Grundfos JP Pump.

- For water sources above and below pump level** - Designed with good suction lift capabilities, the pump is able to draw water up to 8 metres vertically from below the level of the pump
- Excellent value for money** - Ideal for small to medium household use
- Built to last** - Constructed of corrosion resistant composite and stainless steel components
- Automated control and ongoing protection** - The Pressure Manager controller provides a basic level of pump control and protective features.
- Easy installation – plug & pump** - Connect the pump inlet and outlet to the pipework, prime the pump, plug into a power outlet and you're ready to pump

## PUMP NOISE

SCALA2	CM Booster Self-Priming	CME Booster	Jet Pump Range
47 dB Max.	55 dB Max.	55 dB Max.	70 dB Max.

## PUMP SIZING

High pressure for double storey dwellings and long runs of pipe	JP 3-42	JP 4-54	JP 5-48
Adequate pressure for most single storey dwellings	JP 4-47		
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps

Taps are 15 l/min at 22.5 m head

## PROTECTION & CONTROL\*

	JP	JP PT	JP PM
Auto Start/Stop		✓	✓
Non-Return Valve		✓	✓
Dry Run Protection			✓
Anti-Cycling Protection			✓
Alarm Indication LED			✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE DATA

Model	Pressure - H[m]/psi														
	10/15	12.5/18	15/22	17.5/25	20/29	22.5/33	25/36	27.5/40	30/44	32.5/47	35/51	37.5/54	40/58	42.5/62	45/65
	Flow - l/min														
JP 3-42	52	51	51	47	39	31	24	18	13	9					
JP 4-47	69	65	63	60	50	41	33	26	20	14	10				
JP 4-54	68	66	65	63	62	60	52	43	36	29	24	19	14		
JP 5-48	87	87	87	86	86	85	83	71	61	51	42	34	25	16	9

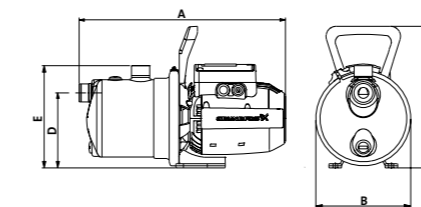
### OPERATING CONDITIONS

Ambient Temperature	0°C to +40°C
Liquid Temperature	0°C to +40°C (Intermittent use to 55°C)
System Pressure	Max. 6 bar
Sound Pressure	JP 3-42: Max. 68 dB JP 4-47: Max. 70 dB JP 4-54: Max. 74 dB JP 5-48: Max. 81 dB

### TECHNICAL DATA

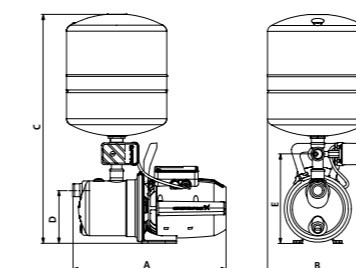
Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	1.5 m with plug
Enclosure Class	Undercover installation recommended (IP44)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES - JP



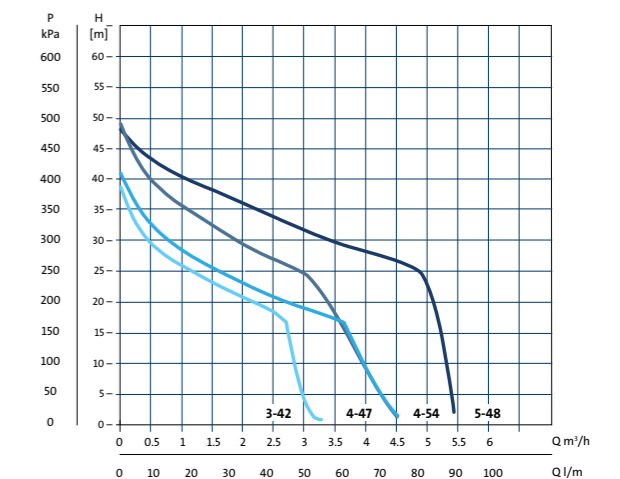
Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
JP 3-42	0.42	1" Female	1" Male	405	186	278	147	200	8
JP 4-47	0.56	1" Female	1" Male	405	186	278	147	200	9
JP 4-54	0.75	1" Female	1" Male	424	186	278	147	200	11
JP 5-48	1.01	1" Female	1" Male	424	186	278	147	200	13

### PHYSICAL ATTRIBUTES - JP PT

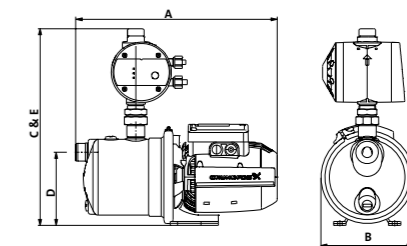


Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
JP 3-42 PT-V	0.42	1" Female	1" Female	423	284	635	147	248	15
JP 4-47 PT-V	0.56	1" Female	1" Female	423	284	635	147	248	16
JP 4-54 PT-V	0.75	1" Female	1" Female	442	284	635	147	248	18
JP 5-48 PT-V	1.01	1" Female	1" Female	442	284	635	147	248	19

### PERFORMANCE CURVE



### PHYSICAL ATTRIBUTES - JP PM



Model	Motor Power P2 (kW)	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
JP 3-42 PM1	0.42	1" Female	1" Male	405	186	390	147	390	11
JP 4-47 PM1	0.56	1" Female	1" Male	405	186	390	147	390	12
JP 4-54 PM1	0.75	1" Female	1" Male	424	186	390	147	390	12
JP 5-48 PM1	1.01	1" Female	1" Male	424	186	390	147	390	15

# PRESSURE MANAGER

## AUTOMATIC PUMP CONTROLLER

The Grundfos Pressure Managers PM1 and PM2 are intelligent pump controllers that make an excellent addition to your domestic pressure pump, providing control automation and ongoing protection.

### PRESSURE MANAGER PM1

The PM1 will automatically start and stop the pump when outlets are turned on or off. The PM1 offers a basic level of pump protection, preventing dry-running and anti-cycling protection, which helps with detecting system leaks or dripping taps.

### PRESSURE MANAGER PM2

The PM2 will automatically start and stop the pump when outlets are turned on or off. It includes the same pump protections as the PM1 but also has the option to prevent the pump from running continuously for more than 30 minutes.

The PM2 also offers a greater level of control, allowing the user to adjust the starting pressure.



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



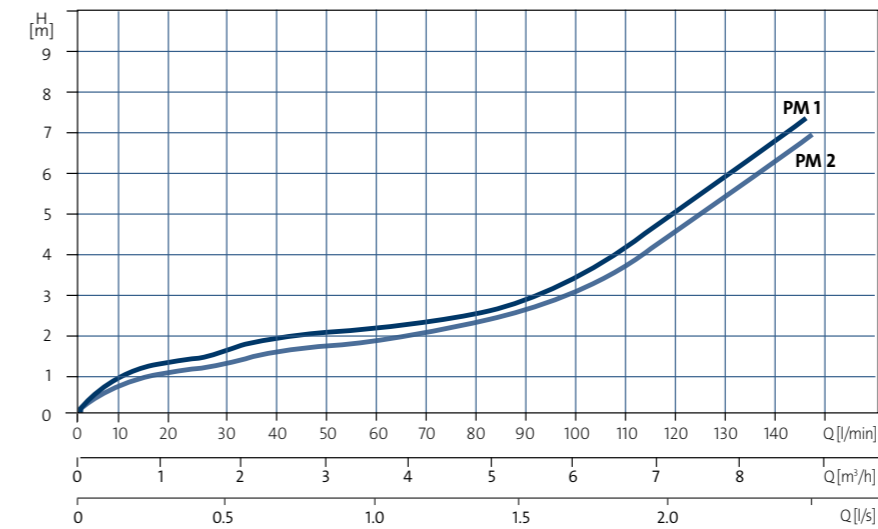
### PROTECTION & CONTROL\*

	Pressure Manager PM1	Pressure Manager PM2
Power On Indicator LED	✓	✓
Pump On Indicator LED	✓	✓
Alarm LED	✓	✓
Auto Start/Stop	✓	✓
Non-Return Valve	✓	✓
Dry Run Protection	✓	✓
Anti-Cycling Protection	✓	✓
Internal Pressure Tank		✓
Max. Continuous Run Time (30 Min.)		✓
Adjustable Start Pressure		✓
Pressure Indication		✓
Automatic Restart		✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PRESSURE LOSS



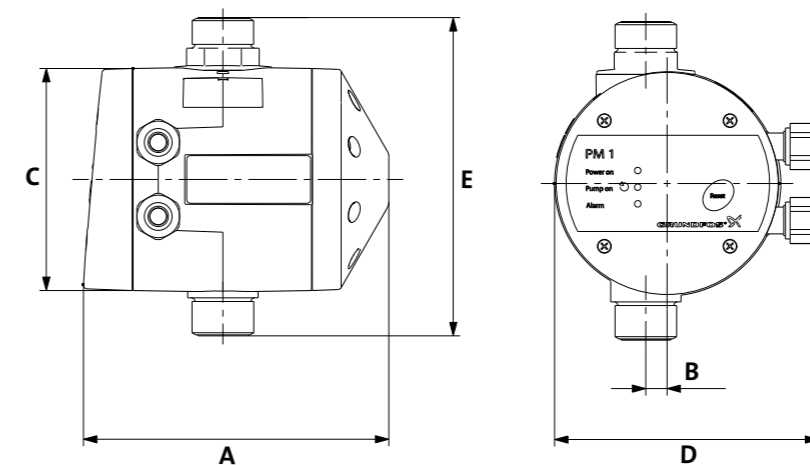
### OPERATING CONDITIONS

Ambient Temperature	0°C to +50°C
Liquid Temperature	0°C to +40°C
Starting Pressure	PM1-1.5: 1.5 bar PM1-2.2: 2.2 bar PM2 1.5-5: 1.5 – 5 bar adjustable
System Pressure	Max. 10 bar

### TECHNICAL DATA

Power Supply Voltage	PM1 - 220-240 Volt, 50/60 Hz – 10A Max PM2 - 220-240 Volt, 50/60 Hz – 10A Max
Enclosure Class	Undercover installation recommended (IP65)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020

### PHYSICAL ATTRIBUTES



Model	Connections		Dimensions (mm)				
	Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)
PM 1-1.5	1" Male	1" Male	165	12	120	143	171
PM 1-2.2	1" Male	1" Male	165	12	120	143	171
PM 2-1.5-5	1" Male	1" Male	175	12	120	143	171

# PRESSURE TANKS

PIPE MOUNTED AND FREE STANDING PRESSURE TANKS



The Grundfos range of pressure tanks are perfect for all types of domestic and industrial applications in conjunction with a wide range of pressure boosting pumps.

The addition of a pressure tank minimises energy costs and extends pump life by greatly reducing the start/stop cycling frequency and protects pipework against water hammer.



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



GT-C

GT-H

GT-D

GT-U

## GT-H / GT-D

- **Industrial grade** - Steel tank with UV resistant epoxy outer coating. Superior polypropylene liner and rubber diaphragm.
- **Trusted performance** - Every tank is individually factory tested guaranteeing perform from day one
- **Long life** - All pipework connections are high grade stainless steel
- **Easy installation** - All free standing tanks come with a tanks stand for stability and ease of pump connection
- **Easy to maintain** - Air valve is located at the top of the tank for easy maintenance

## GT-C

- **Corrosion Proof** - Composite, corrosion proof materials inside and out. The strong fibre-wound outer shell is engineered to withstand harsh environmental conditions.
- **Longer life** - The reinforced diaphragm material provides longer service life
- **Trusted performance** - Every tank is individually factory tested guaranteeing perform from day one

## GT-U+

- **Industrial grade** - All the industrial grade features of the GTH tanks with the added benefit of a replaceable tank diaphragm
- **Long life** - With appropriate maintenance the GT-U+ will provide many years of trouble-free service

## HOSE KITS FOR FREE STANDING TANKS

Connection hoses are available for pressure tanks that are not directly connected to the pump via a connection pipe.

Model	Hose Diameter	Hose Length
Flexible Braided Stainless Steel Hose Kit 25 mm	25 mm	650 mm
Flexible Braided Stainless Steel Hose Kit 25 mm	25 mm	1500 mm
Flexible Braided Stainless Steel Hose Kit 32 mm	32 mm	1500 mm

## TECHNICAL DATA

### SIZE RANGE 8.6 BAR

Model	Capacity Litres	Nominal Draw-off Litres	Connections	Dimensions (mm)		Mounting Type
				Height	Diameter	
GT-C-60 PN8.6 G1 V	60	24	1" Male	660	430	Free Standing
GT-C-80 PN8.6 G1 V	80	32	1" Male	860	430	Free Standing
GT-C-130 PN8.6 G1 V	130	51	1" Male	1240	430	Free Standing
GT-C-250 PN8.6 G1 V	250	99	1 1/4" Male	1310	560	Free Standing

### SIZE RANGE 10 BAR

Model	Capacity Litres	Nominal Draw-off Litres	Connections	Dimensions (mm)		Mounting Type
				Height	Diameter	
GT-H-2 PN10 G1 V	2	0.8	1" Male	183	127	Pipe
GT-H-8 PN10 G1 V	8	3	1" Male	311	203	Pipe
GT-H-18 PN10 G1 V	18	7	1" Male	366	279	Pipe
GT-H-60 PN10 G1 V	60	24	1" Female	528	388	Free Standing
GT-H-80 PN10 G1 V	80	32	1" Female	626	388	Free Standing
GT-H-100 PN10 G1 V	100	40	1" Female	804	430	Free Standing
GT-D-130 PN10 G1 V	130	51	1" Female	1101	406	Free Standing
GT-D-200 PN10 G1 1/2 V	200	79	1 1/4" Female	1042	534	Free Standing
GT-D-240 PN10 G1 1/2 V	240	95	1 1/4" Female	967	634	Free Standing
GT-D-300 PN10 G1 1/2 V	300	118	1 1/4" Female	1575	533	Free Standing
GT-D-450 PN10 G1 1/2 V	450	178	1 1/4" Female	1505	660	Free Standing

### SIZE RANGE 16 BAR

Model	Capacity Litres	Nominal Draw-off Litres	Connections	Dimensions (mm)		Mounting Type
				Height	Diameter	
GT-H-18 PN16 G1 V	18	7	1" Male	366	279	Pipe
GT-H-80 PN16 G1 V	80	32	1" Female	787	388	Free Standing
GT-U+-200 PN16 G1 1/2 V	200	79	1 1/4" Male	1120	590	Free Standing

### SIZE RANGE 25 BAR

Model	Capacity Litres	Nominal Draw-off Litres	Connections	Dimensions (mm)		Mounting Type
				Height	Diameter	
UMB-100LV PN25 G1 V	100	40	1" Female	983	453	Free Standing

## OPERATING CONDITIONS

Liquid Temperature	GT-C: 0°C to +50°C GT-U: 0°C to +70°C GT-H: 0°C to +90°C GT-D: 0°C to +90°C
--------------------	--

## TECHNICAL DATA

Approvals and Markings	Approved for Drinking Water AS/NZS 4020 WorkSafe certified (80 - 450 Litre Tanks) WaterMark Approved (2 - 60 Litre Tanks)
Enclosure Class	Undercover installation recommended
Fixed Speed Pump	Pre-charge should be set at 10% less than cut-in setting
Variable Speed Pump	Pre-charge should be set at 30% less than set point

# ACQUASAVER

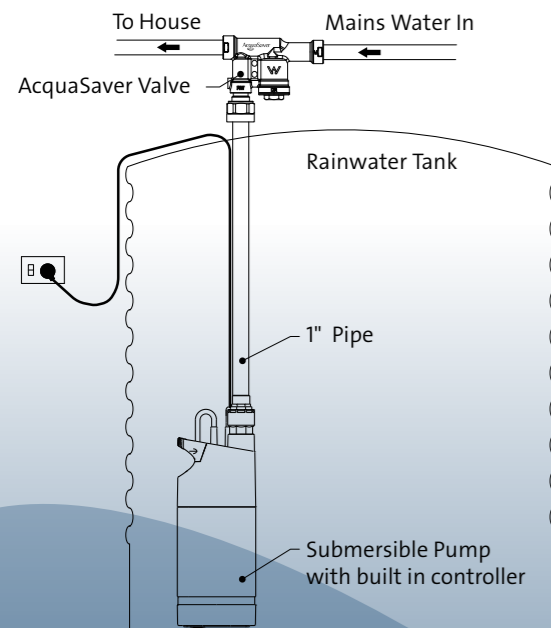
## RAINWATER / MAINS WATER CHANGEOVER DEVICE



ACQUASAVER is a fully automatic rainwater / mains water changeover device, designed for pressure pump supply systems, harvesting rainwater for toilet, laundry and other household applications and requiring mains water backup.

- Simple and reliable hydraulic operation makes ACQUASAVER maintenance free
- No electronic components, so no running costs
- Robust solid brass construction
- Built-in dual back-flow prevention valves
- Space saving and simple to install

### INSTALLATION EXAMPLE



ACQUASAVER 1" / 25 mm



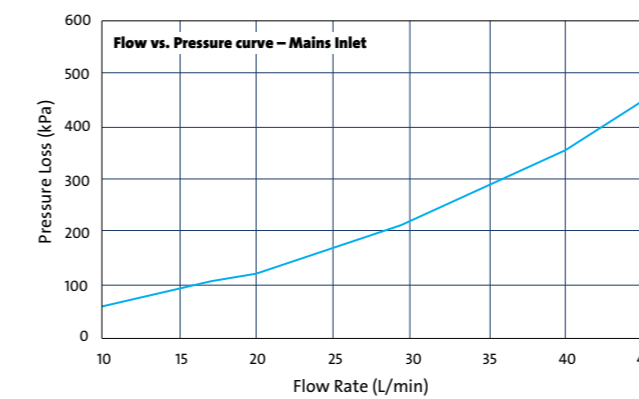
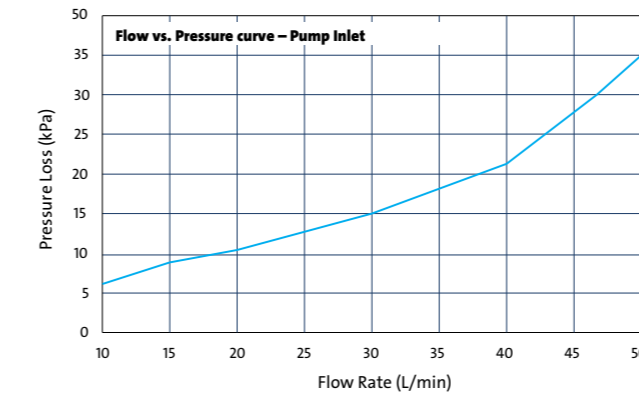
ACQUASAVER 3/4" / 20 mm

	ACQUASAVER 3/4" / 20 mm	ACQUASAVER 1" / 25 mm
Max. flow rate from outlet	50 l/min	100 l/min

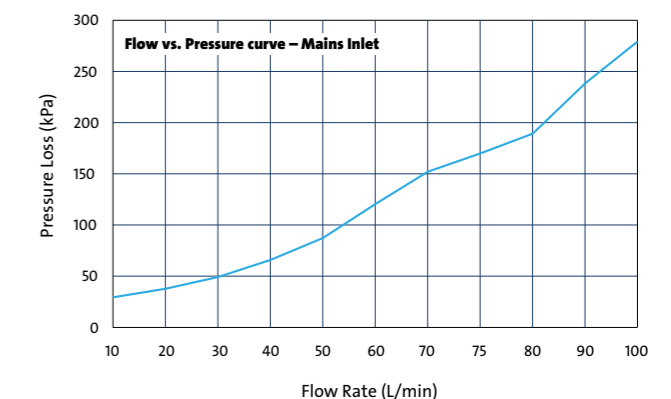
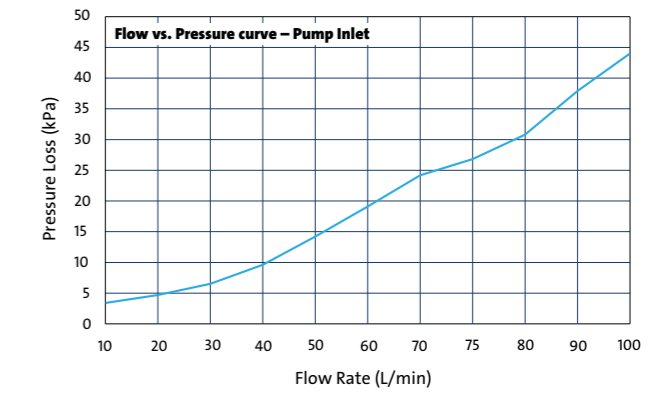
## TECHNICAL & PERFORMANCE DATA

### PRESSURE LOSS

#### 3/4" / 20 mm



#### 1" / 25 mm



### OPERATING CONDITIONS

Liquid Temperature	Acquasaver 20 mm: 0°C to +40°C Acquasaver 25 mm: 0°C to +50°C
Max. Mains Pressure	Acquasaver 20 mm: Max. 5 bar Acquasaver 25 mm: Max. 10 bar
Max. Pump Pressure	Acquasaver 20 mm: Max. 6 bar Acquasaver 25 mm: Max. 6 bar
Max. Flow Rate	Acquasaver 20 mm: 50 l/min Acquasaver 25 mm: 100 l/min

### TECHNICAL DATA

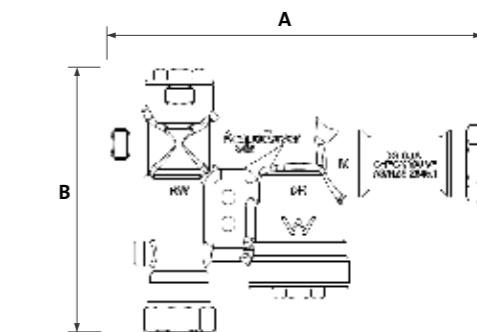
Approvals and Markings

### PHYSICAL ATTRIBUTES

#### 3/4" / 20 mm



#### 1" / 25 mm



Model	Connections			Dimensions (mm)	
	Inlet Mains Water	Inlet Rainwater	Outlet	A (l)	B (h)
ACQUASAVER 20 mm	3/4" Female	1" Female	3/4" Female	150	105
ACQUASAVER 25 mm	1" Female	1" Female	1" Female	210	148

# SUBMERSIBLE BOOSTERS

The Grundfos Submersible Booster Pump range provides options to supply harvested rainwater into the home from both above and below ground water sources.



## RANGE AT A GLANCE



SB

Page 30



SBA

Page 32

Water Source	 
Application	 
Auto Start/Stop	Manual Control
Max. Noise dB(A)	25 dB
Max. number of open taps	5 Taps
Max. number of storeys	Double Storey Home
Wetted Materials	Stainless Steel/Composite
Float Switch/ Dry Run Protection	Yes As standard

Auto Start/Stop  
with Pressure Switch

25 dB

5 Taps

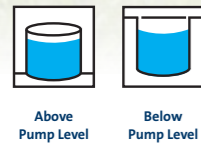
Double Storey  
HomeStainless Steel/  
CompositeYes  
As standard

# SB

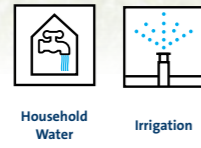
## SUBMERSIBLE BOOSTER



### WATER SOURCE



### APPLICATION



The Grundfos SB is a compact, submersible booster pump designed for the delivery of clean rainwater for domestic use.

- **Start/stop float switch control** - The included float switch will stop the pump if the water source runs dry and re-start when sufficient water is added
- **Virtually silent submerged operation** - Won't disturb your family or neighbours
- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump
- **For water sources above or below ground** - Designed to be submerged in either above ground water tanks or below ground water sources
- **Floating suction strainer option** - Available with standard suction strainer or optional floating suction strainer, which takes in water from the surface where it is likely to be cleaner



### PUMP NOISE

SB	SCALA2	CM Booster Self-Priming	Jet Pump Range
25 dB Max.	47 dB Max.	55 dB Max.	70 dB Max.

### PUMP SIZING

High pressure for double storey dwellings and long runs of pipe	SB 3-45	SB 3-45	
Adequate pressure for most single storey dwellings	SB 3-35	SB 3-35	SB 3-45
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps

Taps are 15 l/min at 22.5 m head

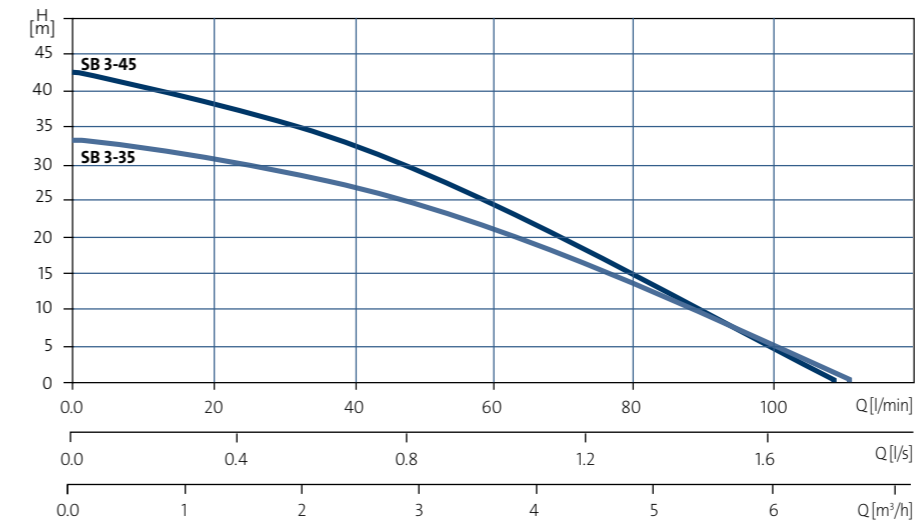
### PROTECTION & CONTROL\*

Auto Start/Stop via Pressure Switch		✓
Non-Return Valve		✓
Dry Run Protection via Float Switch	✓	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



### OPERATING CONDITIONS

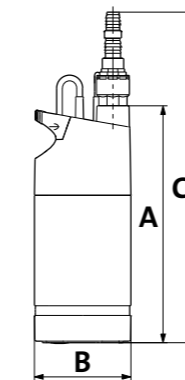
Liquid Temperature	0°C to +40°C
Max. Installation Depth	10 m
pH value of pumped liquid	4-9
Sound Pressure	Max. 25 dB

### TECHNICAL DATA

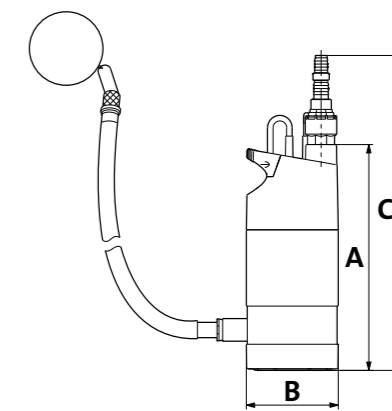
Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	15 m with plug
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES

#### SB A



#### SB AW



Model	Power (kW) P1 / P2	Connections		Dimensions (mm)			Weight (kg)
		Inlet	Outlet	A (h)	B (w)	C (outlet)	
SB 3-35 A	0.80 / 0.54	Stainless Steel Strainer	¾" or 1" Female	390	150	536	9
SB 3-35 AW	0.80 / 0.54	Floating Strainer	¾" or 1" Female	528	150	621	10
SB 3-45 A	1.05 / 0.62	Stainless Steel Strainer	¾" or 1" Female	415	150	584	10
SB 3-45 AW	1.05 / 0.62	Floating Strainer	¾" or 1" Female	553	150	646	11

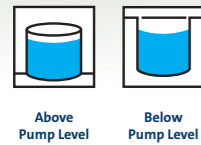


# SBA

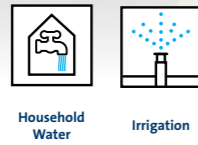
## SUBMERSIBLE BOOSTER WITH INTEGRATED PRESSURE SWITCH



### WATER SOURCE



### APPLICATION



The Grundfos SBA is a compact, submersible booster pump with integrated pressure switch designed for the delivery of clean rainwater into the home.

- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump
- **Automated control and ongoing protection** - An integrated pressure switch and float switch provide pump control and protective features.
- **Virtually silent submerged operation** - Won't disturb your family or neighbours
- **For water sources above or below ground** - Designed to be submerged in either above ground water tanks or below ground water sources

### PUMP NOISE

SBA	SCALA2	CM Booster Self-Priming	Jet Pump Range
25 dB Max.	47 dB Max.	55 dB Max.	70 dB Max.

### PUMP SIZING

High pressure for double storey dwellings and long runs of pipe	SBA 3-45	SBA 3-45	
Adequate pressure for most single storey dwellings	SBA 3-35	SBA 3-35	SBA 3-45
	Small House 2-3 taps	Medium House 3-4 taps	Large House 4-5 taps

Taps are 15 l/min at 22.5 m head

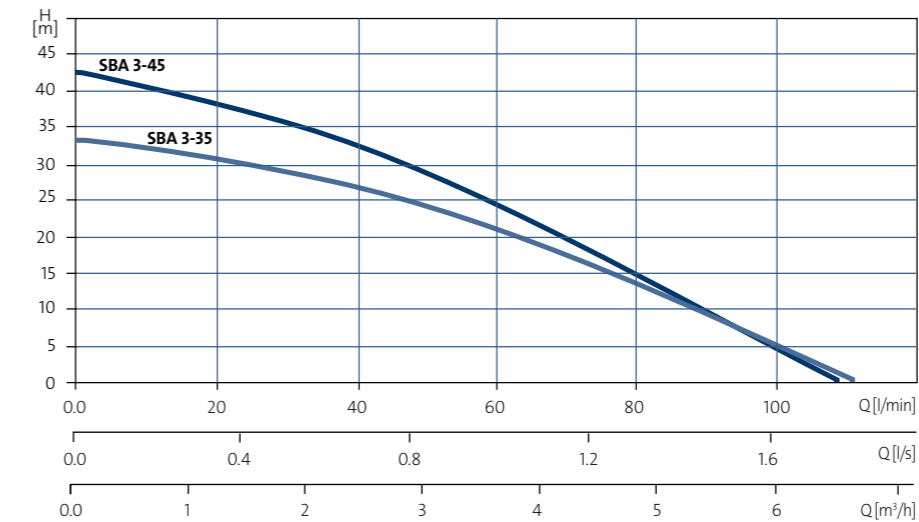
### PROTECTION & CONTROL\*

	SB	SBA
Auto Start/Stop via Pressure Switch		✓
Non-Return Valve		✓
Dry Run Protection via Float Switch	✓	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



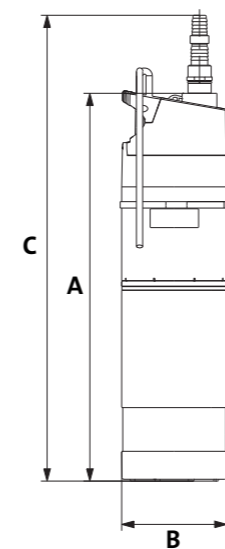
### OPERATING CONDITIONS

Liquid Temperature	0°C to +40°C
Max. Installation Depth	10 m
pH value of pumped liquid	4-9
Sound Pressure	Max. 25 dB

### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	15 m with plug
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES



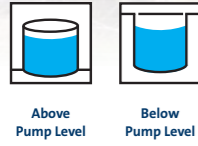
Model	Power (kW) P1 / P2	Connections		Dimensions (mm)			Weight (kg)
		Inlet	Outlet	A (h)	B (w)	C (outlet)	
SBA 3-35 A	0.80 / 0.54	Stainless Steel Strainer	¾" or 1" Female	528	150	621	9
SBA 3-45 A	1.05 / 0.62	Stainless Steel Strainer	¾" or 1" Female	553	150	646	10

# NS

## WATER TRANSFER PUMP

2  
YEAR  
WARRANTY

### WATER SOURCE



### APPLICATION



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos NS pump range has been designed with medium to large scale water transfer purposes in mind. It is perfect for lowering water levels and transferring water quickly between dams or tanks.

After priming and the addition of a foot valve, the NS is capable of suction lift of up to 6 metres.

- **Rugged construction** - Hard-wearing cast iron construction, treated against corrosion to ensure extra long life
- **Move water around quickly** - Perfect for moving water between dams or tanks over long distances or vertically up to 60 metres



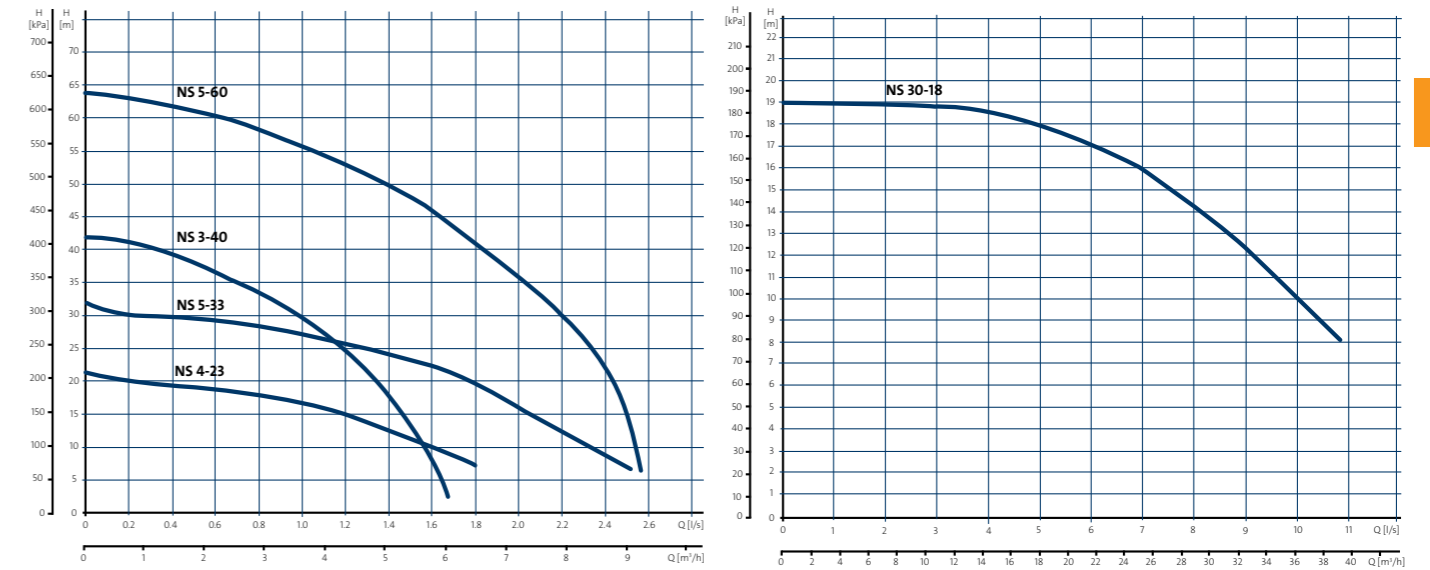
NS Single Impeller



NS Twin Impeller

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



### OPERATING CONDITIONS

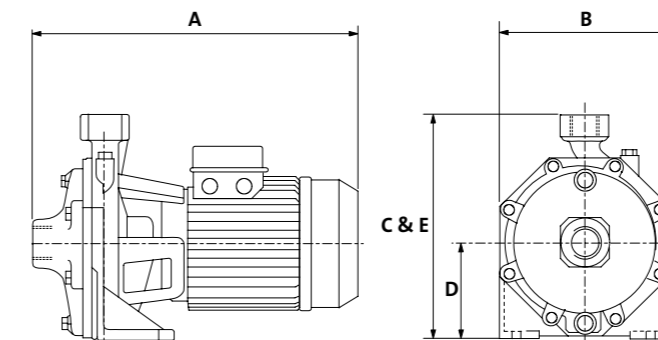
Ambient Temperature	0°C to +40°C
Liquid Temperature	-10°C to +50°C : NS 3-40, 4-23, 5-33 -15°C to +110°C : NS 5-60, 30-18
System Pressure	Max. 6 bar: NS 3-40, 4-23, 5-33, 30-18 Max. 8 bar: NS 5-60
Sound Pressure	Max. 55 dB

### TECHNICAL DATA

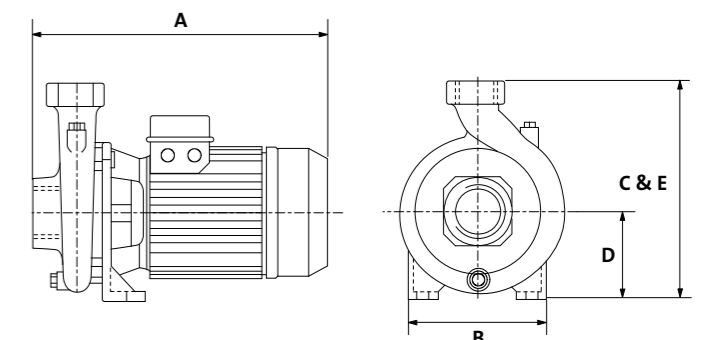
Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	2 m (10A Plug) : NS 3-40, 4-23, 5-33 2 m (15A Plug) : NS 30-18, 5-60
Enclosure Class	Undercover installation recommended (IP44/IP55)
Approvals and Markings	Approved for Drinking Water AS/NZS 4020 C-Tick Compliance

### PHYSICAL ATTRIBUTES

#### NS 3-40, 4-23, 5-33 & 5-60



#### NS 30-18



Model	Power (kW) P1 / P2	Connections		Dimensions (mm)					Weight (kg)
		Inlet	Outlet	A (l)	B (w)	C (h)	D (inlet)	E (outlet)	
NS 3-40	1.20 / 0.75	1" Female	1" Female	362	180	235	100	235	15
NS 4-23	0.65 / 0.37	1" Female	1" Female	275	160	205	85	205	10
NS 5-33	1.30 / 0.75	1" Female	1" Female	330	185	235	100	235	15
NS 5-60	2.70 / 1.85	1 1/4" Female	1" Female	370	210	268	118	268	25
NS 30-18	1.85 / 1.85	2" Female	2" Female	430	200	270	105	270	23

# DRAINAGE & WASTEWATER

The Grundfos range of submersible drainage pumps can help you move water from where it's not wanted, such as emptying tanks, ponds and pools, and can also handle domestic grey water and storm water.

**2**  
YEAR  
WARRANTY

The Grundfos range of lifting stations and grinders allow you to install bathroom and other wet area facilities in locations that are remote from the main sewer. There are a range of options available to handle any combination of plumbing fixtures and appliances.

## RANGE AT A GLANCE

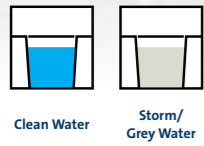
	 UNILIFT CC Page 38	 UNILIFT KP Page 40	 UNILIFT AP12 Page 42	 UNILIFT AP35 Page 44	 UNILIFT AP50 Page 44	 UNILIFT AP35B Page 46	 UNILIFT AP50B Page 46	 UNILIFT APG Page 48	 SOLOLIFT2 Range Page 50-53
Water Source	 Clean Water	 Storm/ Grey Water		 Storm/ Grey Water				 Blackwater	 Grey Water
Application	 Clean Water Drainage	 Storm/Grey Water Handling		 Storm/Grey Water Handling				 Blackwater Handling	 Grey Water Handling
Max. Particle Size	10 mm	10 mm	12 mm	35 mm	50 mm	35 mm	50 mm	40 mm	-
Max. Height	6 m	5 m	10 m	7 m	7 m	7 m	11 m	22 m	6 m
Max. Horizontal	30 m	35 m	445 m	327 m	384 m	226 m	163 m	940 m	90 m
Min. Water Level Suction	55 mm/ 3 mm	100 mm	100 mm	100 mm	100 mm	270 mm	270 mm	-	-
Pump Materials	Composite	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless/ Cast Iron	Composite
Float Switch Options	Float	Float Vert. Float No Float	Float No Float	Float	Float	Float	Float No Float	Float No Float	-

# UNILIFT CC

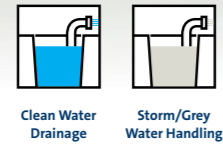
## SUBMERSIBLE DRAINAGE PUMP



### WATER SOURCE



### APPLICATION



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos UNILIFT CC is a submersible drainage pump ideal for all types of storm water and grey water handling around the home.

- **Able to pump down to just 3 mm of water** - Can pump down to a water level of just 3 mm after removing the strainer, making it perfect for draining pools, ponds or tanks for maintenance
- **Suitable for fully or partially submerged use** - Comes with an integrated motor cooling jacket, allowing the pump to operate for extended periods whilst only partially submerged
- **High quality** - Constructed of corrosion resistant composite and stainless steel components inside and out
- **Light weight** - At a weight of no more than 7 kg, the UNILIFT CC can be used in either a permanent installation or as a portable drainage pump
- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump



### PUMP SIZING

Vertical Height	UNILIFT CC 5	UNILIFT CC 7	UNILIFT CC 9
	32 mm pipework 0.8 l/sec flow rate	32 mm pipework 0.8 l/sec flow rate	32 mm pipework 0.8 l/sec flow rate
Maximum Horizontal Pipe Length			
6 m			3 m
5 m			8 m
4 m			14 m
3 m		8 m	19 m
2 m	6 m	16 m	24 m
1 m	30 m	25 m	29 m

### MAXIMUM PARTICLE SIZE

UNILIFT CC	UNILIFT AP 12	UNILIFT AP 35 & AP 35B	UNILIFT AP50 & AP50B
10 mm	12 mm	35 mm	50 mm

### PROTECTION & CONTROL\*

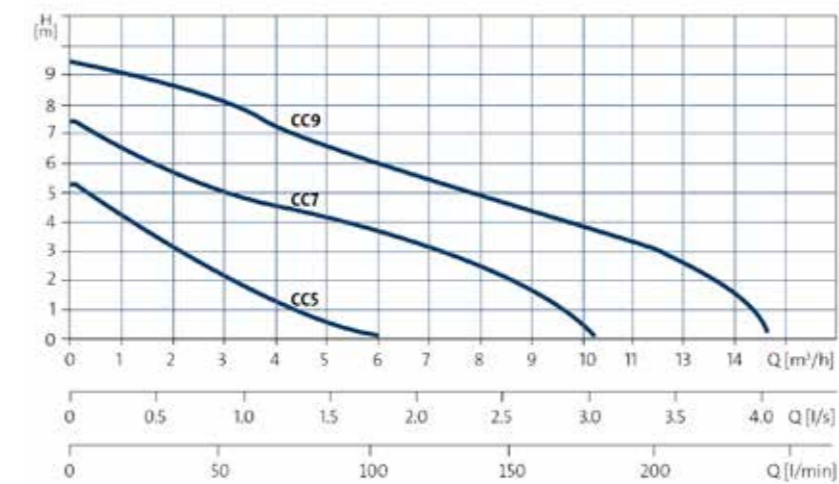
	UNILIFT CC
Auto Start/Stop by Float Switch	✓
Non-Return Valve	✓
Motor Cooling Jacket	✓
Automatic Restart	✓

Flow based on at least 1 m/sec velocity

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



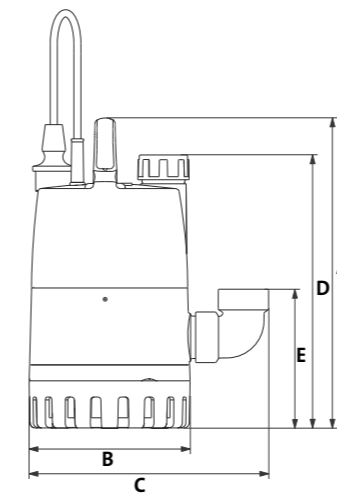
### OPERATING CONDITIONS

Liquid Temperature	0°C to +40°C
Max. Particle Size	10 mm
Max. Installation Depth	10 m
Minimum Pumping Level	Down to 3 mm (after removal of strainer)
pH value of pumped liquid	4 to 9

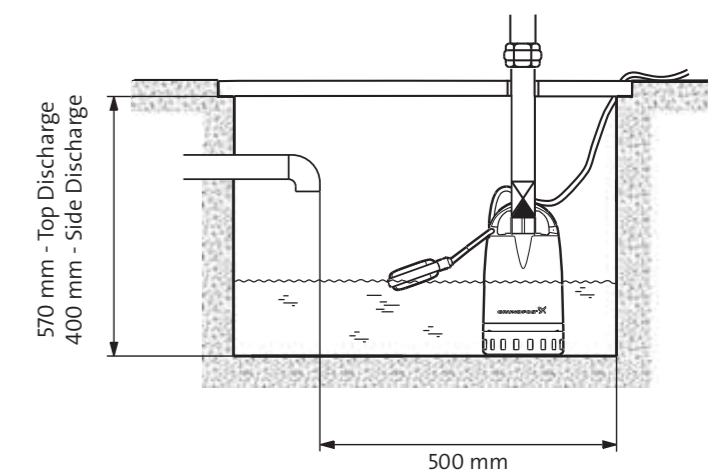
### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	5 m/ 10 m with plug
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	C-Tick Compliance
Impeller Type	Semi-open

### PHYSICAL ATTRIBUTES



### MINIMUM PIT DIMENSIONS UNILIFT CC



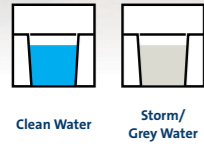
Model	Power (kW) P1 / P2	Connections		Dimensions (mm)					Weight (kg)
		Outlet (Top)	Outlet (Side)	A (h)	B (w1)	C (w2)	D (outlet 1)	E (outlet 2)	
UNILIFT CC 5	0.25 / 0.10	¾", 1" or 1 ¼" Male	1 ¼" Female	306	160	238	270	90	5
UNILIFT CC 7	0.38 / 0.17	¾", 1" or 1 ¼" Male	1 ¼" Female	306	160	238	270	90	5
UNILIFT CC 9	0.78 / 0.47	¾", 1" or 1 ¼" Male	1 ¼" Female	342	160	238	308	90	7

# UNILIFT KP

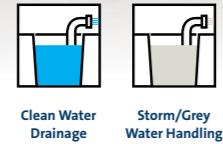
## SUBMERSIBLE STAINLESS STEEL DRAINAGE PUMP



### WATER SOURCE



### APPLICATION



The Grundfos UNILIFT KP is a highly durable submersible pump constructed from stainless steel, making it ideal for all types of grey water and storm water handling around the home and in light industrial applications.

- **High corrosion resistance** - Constructed of high quality industrial grade components. All parts in contact with water are made from 304 stainless steel.
- **Options for confined areas** - A vertical Niro Float Switch option is available for installation into confined pits where a regular float may not operate properly
- **Suitable for fully or partially submerged use** - Comes with an integrated motor cooling jacket, allowing the pump to operate for extended periods whilst only partly submerged
- **Light weight and portable** - At a weight of no more than 7 kg the UNILIFT KP can be used in either a permanent installation or as a portable drainage pump
- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump



### PUMP SIZING

	UNILIFT KP 150	UNILIFT KP 250	UNILIFT KP 350
	32 mm pipework 1.4 l/sec flow rate	32 mm pipework 1.4 l/sec flow rate	32 mm pipework 2.0 l/sec flow rate
Vertical Height	Maximum Horizontal Pipe Length		
5 m		1 m	5 m
4 m		10 m	9 m
3 m		18 m	13 m
2 m	9 m	26 m	17 m
1 m	17 m	35 m	22 m

### MAXIMUM PARTICLE SIZE

UNILIFT KP	UNILIFT AP 12	UNILIFT AP 35 & AP 35B	UNILIFT AP50 & AP50B
10 mm	12 mm	35 mm	50 mm

### PROTECTION & CONTROL\*

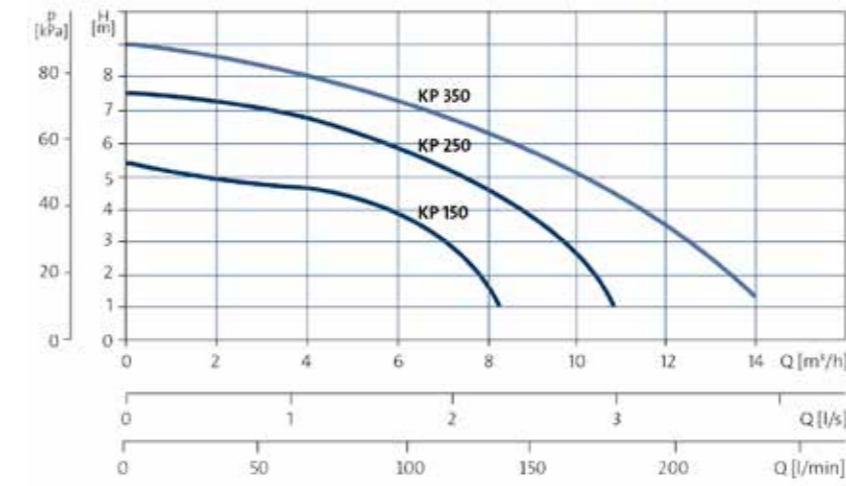
	UNILIFT KP (No Float)	UNILIFT KP (Float)
Auto Start/Stop by Float Switch		✓
Non-Return Valve		✓
Motor Cooling Jacket	✓	✓
Automatic Restart	✓	✓

Flow based on at least 1 m/sec velocity

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



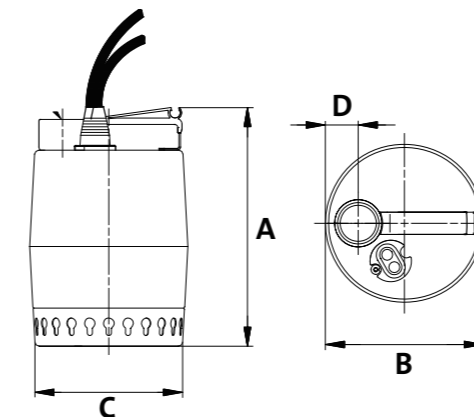
### OPERATING CONDITIONS

Liquid Temperature	0°C to +50°C
Max. Particle Size	10 mm
Max. Installation Depth	10 m
Minimum Pumping Level	Down to 100 mm
pH value of pumped liquid	4 to 9

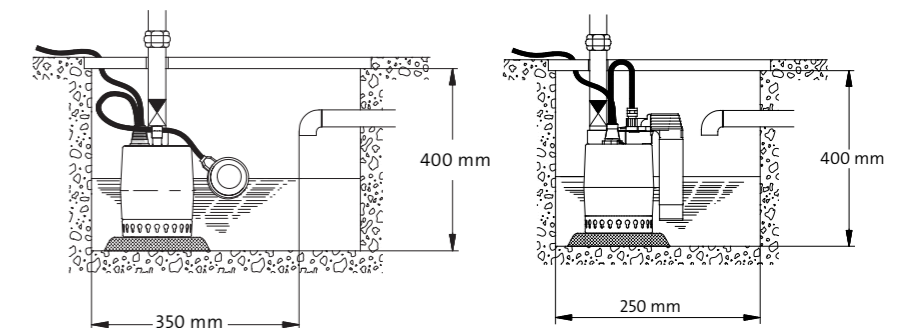
### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	5 m with plug
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	C-Tick Compliance
Impeller Type	Semi-open

### PHYSICAL ATTRIBUTES



### MINIMUM PIT DIMENSIONS UNILIFT KP - NORMAL/VERTICAL FLOAT



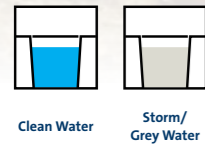
Model	Motor Power P2 (kW)	Connection Outlet	Dimensions (mm)				Weight (kg)
			A (h)	B (w1)	C (w2)	D (outlet)	
UNILIFT KP 150	0.30	1 1/4" Female	225	140	149	31	7
UNILIFT KP 250	0.48	1 1/4" Female	225	140	149	31	7
UNILIFT KP 350	0.70	1 1/4" Female	235	140	149	31	7

# UNILIFT AP 12

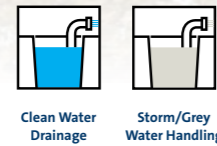
HEAVY DUTY, SUBMERSIBLE STAINLESS STEEL GREY WATER PUMP



## WATER SOURCE



## APPLICATION



The Grundfos UNILIFT AP 12 is a heavy duty, submersible pump constructed from stainless steel, making it ideal for all types of grey and storm water handling around the home and in light industrial applications.

- **Highly corrosion resistant** - Constructed of high quality industrial grade components. All parts in contact with the pumped liquid are made from 304 stainless steel
- **Suitable for fully or partially submerged use** - Comes with an integrated motor cooling jacket, allowing the pump to operate for extended periods whilst only partially submerged
- **Permanent or portable use** - Can be used in either a permanent installation or as a portable drainage pump
- **Float switch options** - Available with or without float switch to suit different installation configurations
- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump



## PUMP SIZING

Vertical Height	UNILIFT AP 12 40.04	UNILIFT AP 12 40.06	UNILIFT AP 12 40.08	UNILIFT AP 12 50.11
		50 mm pipework 2.5 l/sec flow rate	50 mm pipework 3.0 l/sec flow rate	50 mm pipework 3.5 l/sec flow rate
Maximum Horizontal Pipe Length				
10 m				15 m
9 m			7 m	63 m
8 m		10 m	33 m	111 m
7 m	4 m	44 m	59 m	158 m
6 m	51 m	78 m	85 m	206 m
5 m	99 m	112 m	111 m	254 m
4 m	146 m	146 m	137 m	302 m
3 m	193 m	180 m	163 m	350 m
2 m	240 m	215 m	189 m	398 m
1 m	287 m	249 m	215 m	445 m

Flow based on at least 1 m/sec velocity

## MAXIMUM PARTICLE SIZE

UNILIFT CC/KP	UNILIFT AP 12	UNILIFT AP 35 & AP 35B	UNILIFT AP50 & AP50B
10 mm	12 mm	35 mm	50 mm

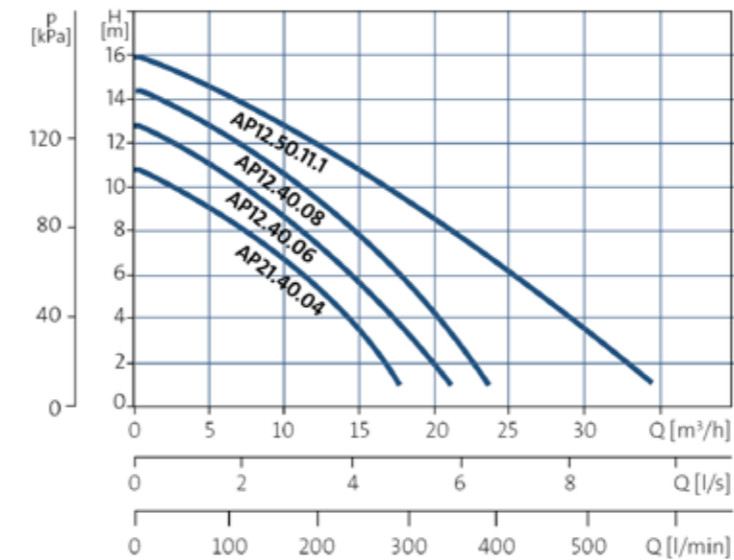
## PROTECTION & CONTROL\*

	UNILIFT AP 12 (No Float)	UNILIFT AP 12 (Float)
Auto Start/Stop by Float Switch		✓
Non-Return Valve		✓
Motor Cooling Jacket	✓	✓
Automatic Restart	✓	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



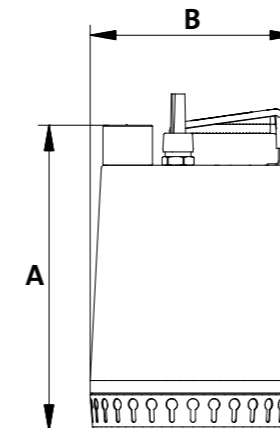
### OPERATING CONDITIONS

Liquid Temperature	0°C to +55°C (70°C for 2 mins)
Max. Particle Size	12 mm
Max. Installation Depth	7 m
Minimum Pumping Level	Down to 100 mm
pH value of pumped liquid	4 to 10

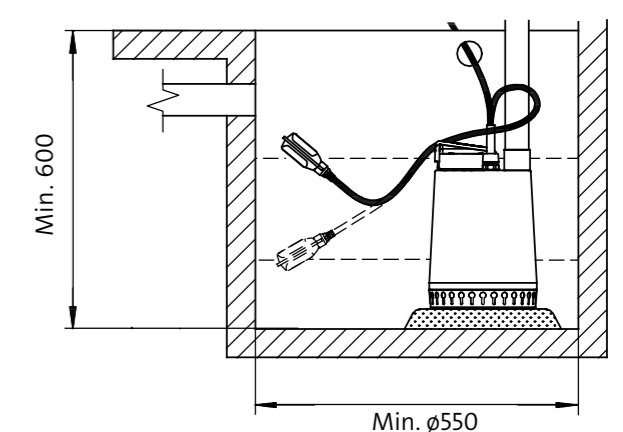
### TECHNICAL DATA

Power Supply Voltage	Single phase: 220-240 Volt, 50 Hz Three phase: 380-400 Volt, 50 Hz
Power Supply Cable	10 m with plug (Single Phase) No plug (Three Phase)
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	C-Tick Compliance
Impeller Type	Semi-open

## PHYSICAL ATTRIBUTES



## MINIMUM PIT DIMENSIONS UNILIFT AP 12



Model	Power (kW) P1 / P2	Connection Outlet	Dimensions (mm)		Weight (kg)
			A (h)	B (w)	
UNILIFT AP 12.40.04	0.70 / 0.40	1½" Female	321	216	11
UNILIFT AP 12.40.06	0.90 / 0.60	1½" Female	321	216	11
UNILIFT AP 12.40.08	1.30 / 0.80	1½" Female	346	216	13
UNILIFT AP 12.50.11	1.70 / 1.10	2" Female	357	241	15

# UNILIFT AP 35 & 50

HEAVY DUTY, SUBMERSIBLE STAINLESS STEEL GREY WATER PUMP



## WATER SOURCE



Storm/  
Grey Water

## APPLICATION



Storm/Grey  
Water Handling

The Grundfos UNILIFT AP 35 and AP 50 are heavy duty, submersible pumps constructed from stainless steel, making them ideal for handling dirty stormwater runoff, domestic wastewater from bathroom basins or showers and fibrous laundry wastewater.

- **Highly corrosion resistant** - Constructed of high quality industrial grade components. All parts in contact with the pumped liquid are made from 304 stainless steel
- **Handles very dirty water with ease** - Can both easily pump large particles in storm water run off or material fibres in laundry grey water
- **Suitable for fully or partially submerged use** - Come with an integrated motor cooling jacket, allowing the pump to operate for extended periods whilst only partly submerged
- **Float switch options** - Available with or without float switch to suit different installation configurations
- **Permanent or portable use** - The UNILIFT AP35 and 50 can be used in either a permanent installation or as a portable drainage pump
- **Easy submerged installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump.



UNILIFT AP 35  
SCAN THE QR CODE  
TO LINK TO GRUNDFOS  
PRODUCT CENTER



UNILIFT AP 50  
SCAN THE QR CODE  
TO LINK TO GRUNDFOS  
PRODUCT CENTER



## PUMP SIZING

## MAXIMUM PARTICLE SIZE

Vertical Height	UNILIFT AP 35 40.06	UNILIFT AP 35 40.08	UNILIFT AP 50 50.08	UNILIFT AP 50 50.11
	40 mm pipework 2.0 l/sec flow rate	50 mm pipework 2.5 l/sec flow rate	50 mm pipework 3.0 l/sec flow rate	65 mm pipework 4.0 l/sec flow rate
7 m	Maximum Horizontal Pipe Length			
6 m	15 m	91 m	16 m	88 m
5 m	38 m	138 m	50 m	147 m
4 m	62 m	185 m	85 m	206 m
3 m	86 m	233 m	119 m	265 m
2 m	110 m	280 m	153 m	324 m
1 m	134 m	327 m	187 m	384 m

UNILIFT CC / KP	UNILIFT AP 12	UNILIFT AP 35 & AP 35B	UNILIFT AP 50 & AP 50B
10 mm	12 mm	35 mm	50 mm

## PROTECTION & CONTROL\*

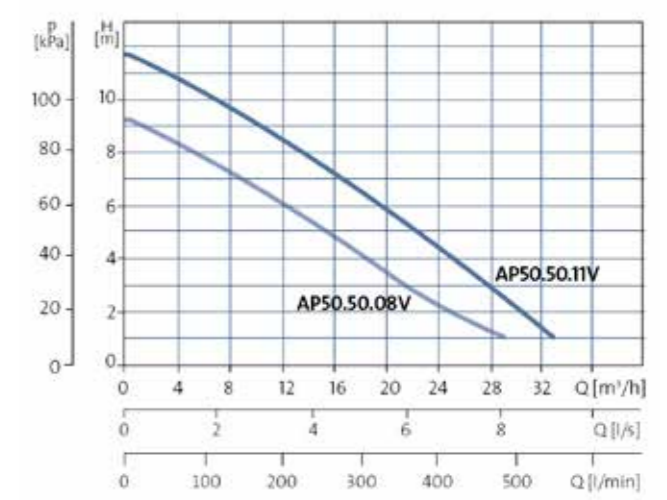
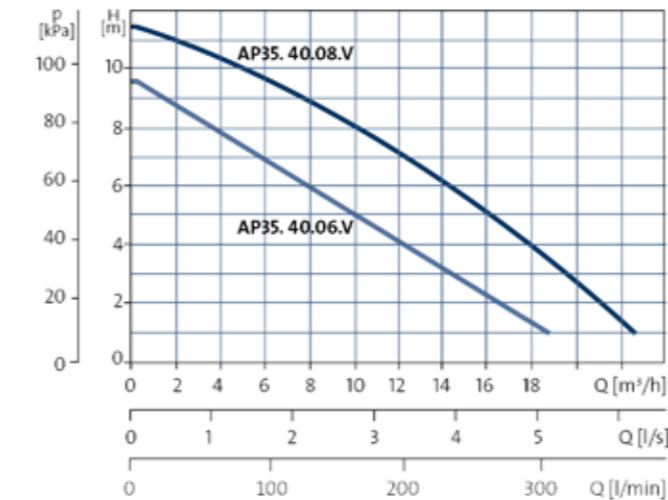
	UNILIFT AP 35	UNILIFT AP 50
Auto Start/Stop by Float Switch	✓	✓
Non-Return Valve	✓	✓
Motor Cooling Jacket	✓	✓
Automatic Restart	✓	✓

Flow based on at least 1 m/sec velocity

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



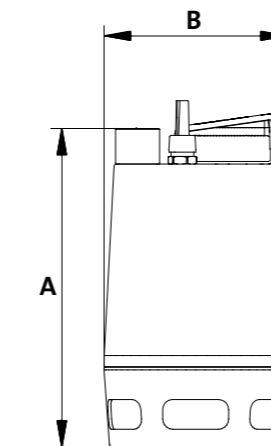
### OPERATING CONDITIONS

Liquid Temperature	0°C to +55°C
Max. Particle Size	AP 35 (35 mm) AP 50 (50 mm)
Max. Installation Depth	7 m
Minimum Pumping Level	Down to 100 mm
pH value of pumped liquid	4 to 10

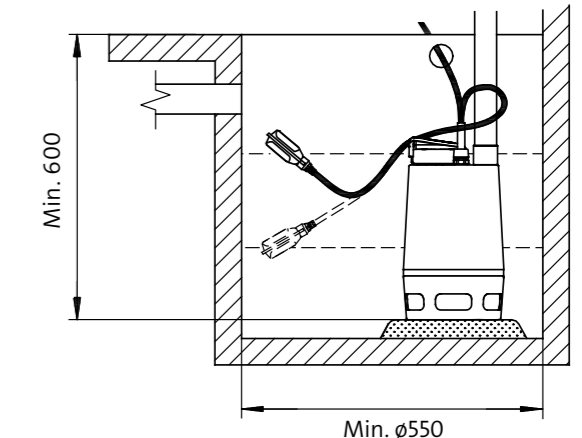
### TECHNICAL DATA

Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	10 m with plug
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	C-Tick Compliance
Impeller Type	Vortex

### PHYSICAL ATTRIBUTES



### MINIMUM PIT DIMENSIONS UNILIFT AP35 & AP50



Model	Power (kW) P1 / P2	Connection	Dimensions (mm)		Weight (kg)
		Outlet	A (h)	B (w)	
UNILIFT AP 35.40.06	0.90 / 0.60	1½" Female	376	216	11
UNILIFT AP 35.40.08	1.20 / 0.70	1½" Female	410	216	13
UNILIFT AP 50.50.08	1.30 / 0.80	2" Female	436	241	15
UNILIFT AP 50.50.11	1.60 / 1.10	2" Female	436	241	15

# UNILIFT AP 35B & 50B

HEAVY DUTY, SUBMERSIBLE STAINLESS STEEL GREY WATER PUMP



## WATER SOURCE



Storm/  
Grey Water

## APPLICATION



Storm/Grey  
Water Handling



UNILIFT AP 35B  
SCAN THE QR CODE  
TO LINK TO GRUNDFOS  
PRODUCT CENTER



UNILIFT AP 50B  
SCAN THE QR CODE  
TO LINK TO GRUNDFOS  
PRODUCT CENTER

The Grundfos UNILIFT AP 35B and AP 50B are heavy duty, submersible pumps of stainless steel and composite construction, which are ideal for handling dirty stormwater runoff, domestic wastewater from bathroom basins or showers and fibrous laundry wastewater.

- **Highly corrosion resistant** - Constructed of high quality industrial grade components. All internal parts are manufactured from 304 stainless steel
- **Handle very dirty water with ease** - Can both easily pump large particles in stormwater run off or material fibres in laundry grey water
- **Easy installation – plug & pump** - Connect the pump outlet to the pipework, plug into a power outlet and you're ready to pump
- **Simple cleaning and maintenance** - Features quick release clips allowing easy dismantling of the pump body for cleaning or unblocking. AP35B & 50B can be permanently installed on an auto-coupling device for trouble free maintenance.



UNILIFT AP 35B

UNILIFT AP 50B

## PUMP SIZING

Vertical Height	Maximum Horizontal Pipe Length				
	UNILIFT AP 35B 50.06	UNILIFT AP 35B 50.08	UNILIFT AP 50B 50.08	UNILIFT AP 50B 50.11	UNILIFT AP 50B 50.15
10 m	50 mm pipework 2.5 l/sec flow rate	50 mm pipework 3.0 l/sec flow rate	50 mm pipework 3.0 l/sec flow rate	50 mm pipework 4.0 l/sec flow rate	50 mm pipework 4.5 l/sec flow rate
9 m				11 m	44 m
8 m				29 m	59 m
7 m		30 m		47 m	73 m
6 m	19 m	60 m	14 m	64 m	88 m
5 m	61 m	89 m	44 m	82 m	102 m
4 m	102 m	119 m	74 m	101 m	116 m
3 m	143 m	149 m	103 m	118 m	131 m
2 m	185 m	179 m	133 m	136 m	145 m
1 m	226 m	209 m	163 m	154 m	160 m

Flow based on at least 1 m/sec velocity

## MAXIMUM PARTICLE SIZE

UNILIFT CC / KP	UNILIFT AP 12	UNILIFT AP 35 & AP 35B	UNILIFT AP 50 & AP 50B
10 mm	12 mm	35 mm	50 mm

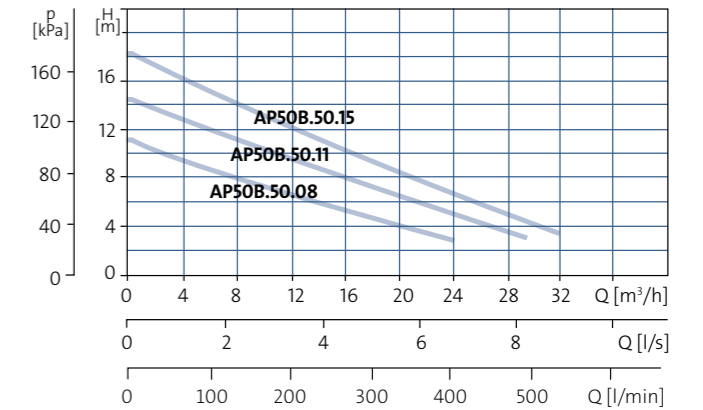
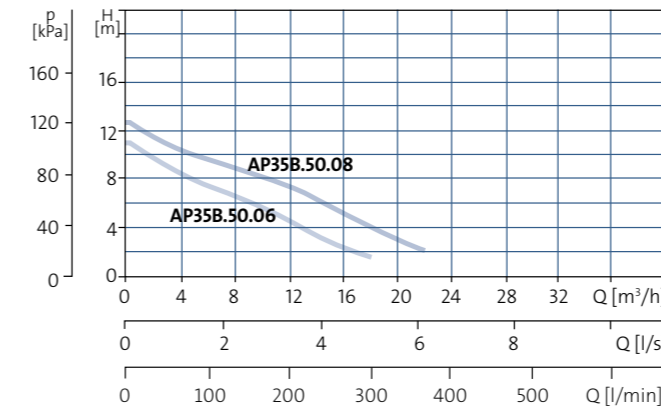
## PROTECTION & CONTROL\*

	UNILIFT AP 35B	UNILIFT AP 50B
Auto Start/Stop by Float Switch	✓	✓
Non-Return Valve	✓	✓
Overheating Protection with Automatic Restart	✓	✓
Auto Coupling Option	✓	✓

\*For full explanation of Protection and Controls see page 69-70

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



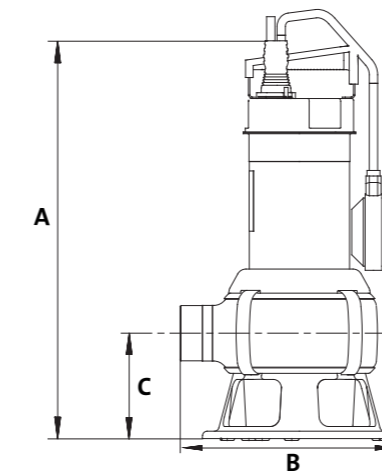
### OPERATING CONDITIONS

Liquid Temperature	0°C to +40°C
Max. Particle Size	AP 35B (35 mm) AP 50B (50 mm)
Max. Installation Depth	7 m
Minimum Pumping Level	Down to 270 mm
pH value of pumped liquid	4 to 10

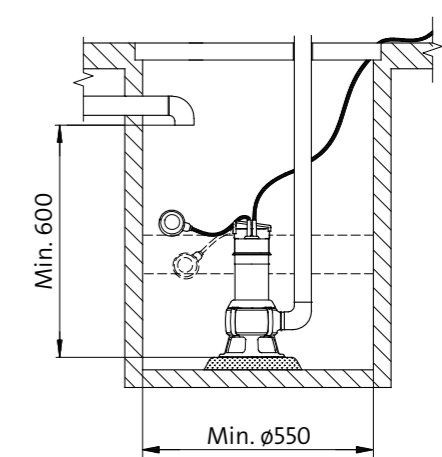
### TECHNICAL DATA

Power Supply Voltage	Single Phase: 220-240 Volt, 50 Hz Three Phase: 380-400 Volt, 50 Hz
Power Supply Cable	Single Phase: 10 m with plug Three Phase: 10 m hard wired
Enclosure Class	Suitable for submerged installation (IP68)
Approvals and Markings	C-Tick Compliance.
Impeller Type	Vortex

### PHYSICAL ATTRIBUTES



### MINIMUM PIT DIMENSIONS UNILIFT AP35B & AP50B



Model	Power (kW) P1 / P2	Connection Outlet	Dimensions (mm)			Weight (kg)
			A (h)	B (w)	C (Outlet)	
UNILIFT AP 35B.50.06.A1 V	1.00 / 0.66	2" Female	443	234	116	10
UNILIFT AP 35B.50.08.A1 V	1.47 / 1.02	2" Female	468	234	116	12
UNILIFT AP 50B.50.08.A1 V	1.20 / 0.74	2" Female	468	234	116	10
UNILIFT AP 50B.50.11.A1 V	1.80 / 1.20	2" Female	468	234	116	10
UNILIFT AP 50B.50.11.3 V	1.75 / 1.31	2" Female	468	234	116	12
UNILIFT AP 50B.50.15.3 V	2.15 / 1.50	2" Female	468	234	116	12

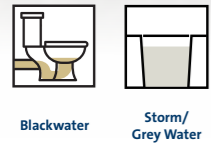


# UNILIFT APG

## DOMESTIC WASTEWATER GRINDER PUMP



### WATER SOURCE



### APPLICATION



Designed to grind and move domestic wastewater or stormwater over long distances, the new UNILIFT APG is a versatile and reliable pumping solution.

- **Industrial Grinder** - based on Grundfos' industrial SEG wastewater pump range, the UNILIFT APG is capable of grinding the most challenging wastewater debris into small pieces
- **Flexible Installation Options** - APG comes with a combi-flange making it easy to install into existing pits or match with existing pipework. Use the DN32/40 flange or the 48 mm internal threaded connection
- **Suits a variety of applications** - from single family homes to low-rise residential buildings, the UNILIFT APG can be used inside a building in a lifting station, or outside in a pumping station or pit
- **Team up with LC231 or LC241 controller** - Flexible control and monitoring options for one or two pumps systems



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UNILIFT APG with float switch



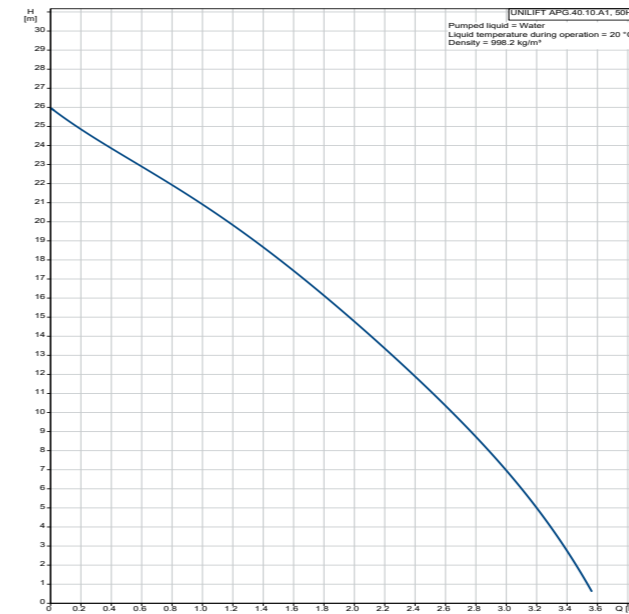
UNILIFT APG no float switch

### PUMPING DISTANCE

Head \ Distance	DN32/40 Outlet Pipe Length	DN32/40 Outlet Pipe Length
22 m	Max. 25/35 m	
20 m	Max. 90/120 m	
18 m	Max. 160/215 m	Max. 19/25 m
16 m	Max. 225/305 m	Max. 40/55 m
14 m	Max. 295/395 m	Max. 65/90 m
12 m	Max. 360/485 m	Max. 90/120 m
10 m	Max. 430/575 m	Max. 115/150 m
8 m	Max. 495/665 m	Max. 135/185 m
6 m	Max. 565/755 m	Max. 160/215 m
4 m	Max. 630/850 m	Max. 185/250 m
2 m	Max 700/940 m	Max. 210/280 m
Flow	Q=35/53 l/min (v=0.7 m/s)	Q= 60/90 l/min (v=1.2 m/s)

## TECHNICAL DATA

### PERFORMANCE CURVE



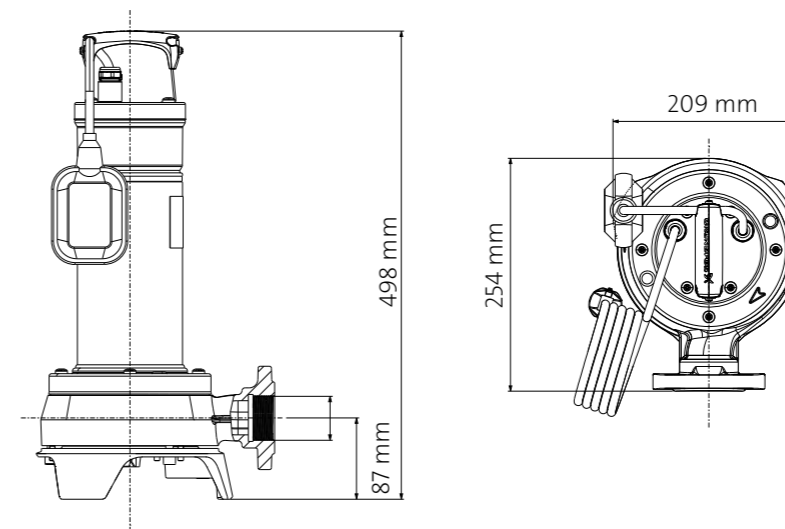
### OPERATING CONDITIONS

Liquid Temperature	0°C to +40°C (70°C for 3 minutes)
Max. Particle Size	40 mm
Max. Installation Depth	7 m

### TECHNICAL DATA

Power Supply Voltage	Single Phase: 220-240V, 50 Hz
Power Supply Cable	10 m with plug
Enclosure Class	Submerged installation (IP68)
Approvals and Markings	C-Tick Compliance

### PHYSICAL ATTRIBUTES



Model	Power (kW) P1 / P2	Outlet	Weight (kg)
UNILIFT APG.40.10.A1 (with Float)	1.3 / 1.0	Flange: DN32 / DN40 Thread: 1 1/2" Female	25
UNILIFT APG.40.10.1 (no Float)	1.3 / 1.0		25

# SOLOLIFT2 WC-1, WC-3 & CWC-3

COMPACT GREY WATER AND BLACKWATER HANDLING STATION

## WATER SOURCE



Blackwater Grey Water

## APPLICATION



Blackwater Handling Grey Water Handling

The Grundfos SOLOLIFT2 WC-1, WC-3 and CWC-3 lifting stations are all-in-one grinding and pumping units designed for the effective handling of a combination of bathroom grey water and toilet wastewater. Designed to be installed below street level or away from existing sewerage pipework.

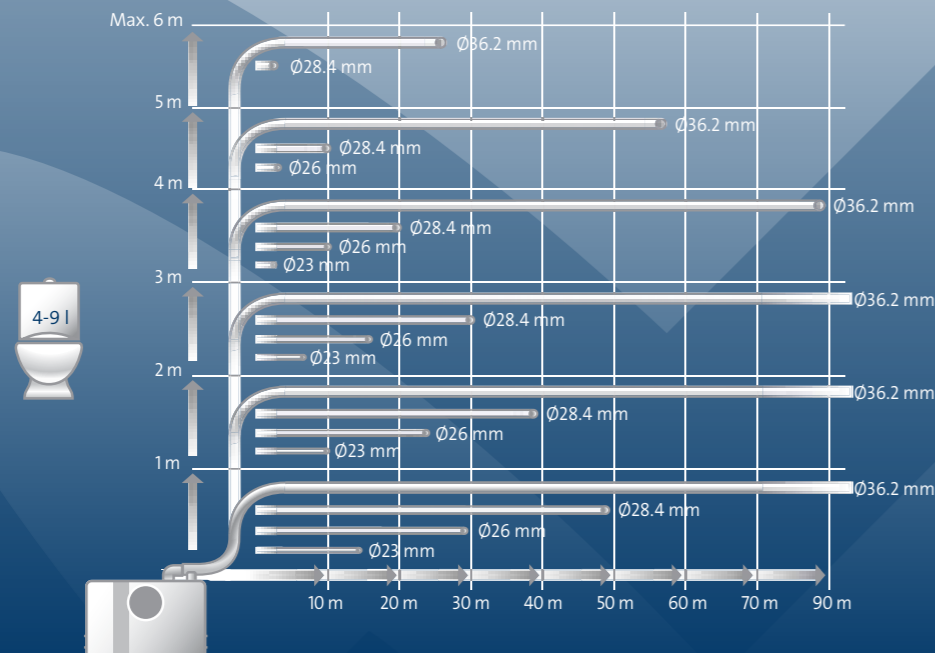
- **Very low maintenance** - Thanks to the powerful built-in grinder, blockages are greatly minimised
- **Space saving design fits small spaces** - Compact units making them suitable for installation in to small bathrooms
- **Low installation costs** - Plumbing connections are adjustable up to 10 mm, making installation to existing or new pipework simple and inexpensive

**SOLOLIFT2 WC-1** - Suitable for connection to one floor mounted toilet and one additional appliance, such as a handbasin.

**SOLOLIFT2 WC-3** - Suitable for connection to one floor mounted toilet and a maximum of three additional appliances, such as hand basins or a shower.

**SOLOLIFT2 CWC-3** - Compact unit suitable for connection to one wall mounted toilet and a maximum of three additional appliances, such as hand basins or shower.

## PUMP SIZING



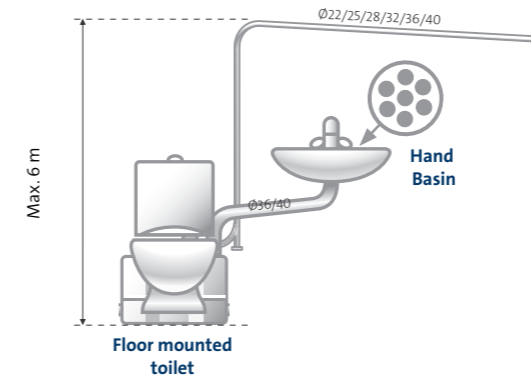
SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



## TECHNICAL DATA

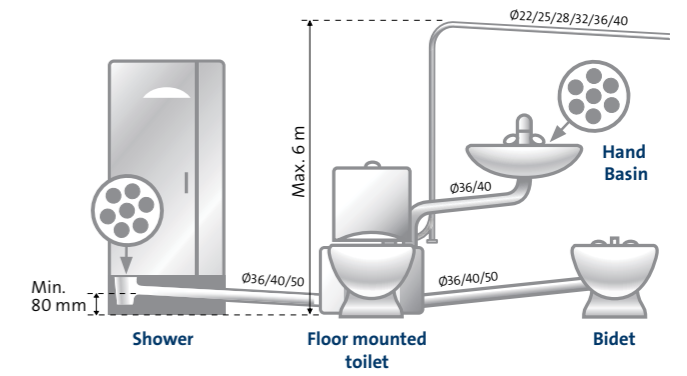
### INSTALLATION SCHEMATIC\*

#### SOLOLIFT2 WC-1

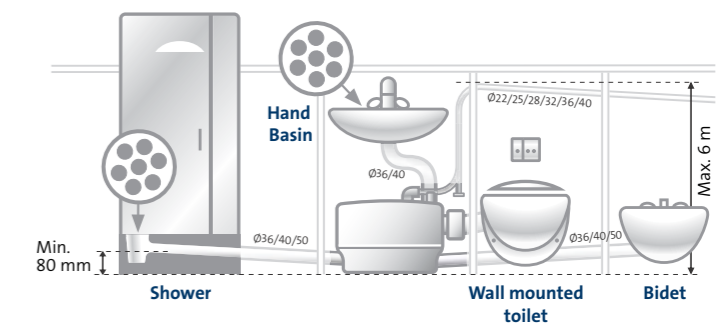


\*Illustrative purposes only

#### SOLOLIFT2 WC-3



#### SOLOLIFT2 CWC-3



### OPERATING CONDITIONS

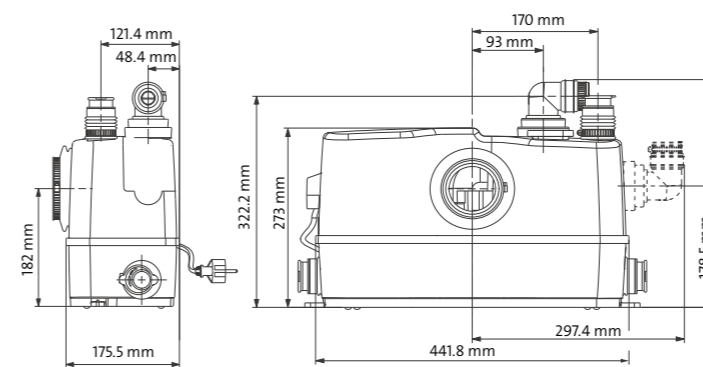
Liquid Temperature	0°C to +50°C
pH value of pumped liquid	4-10
Tank Volume	9.0 litres
Sound Pressure	Max. 70 dB

### TECHNICAL DATA

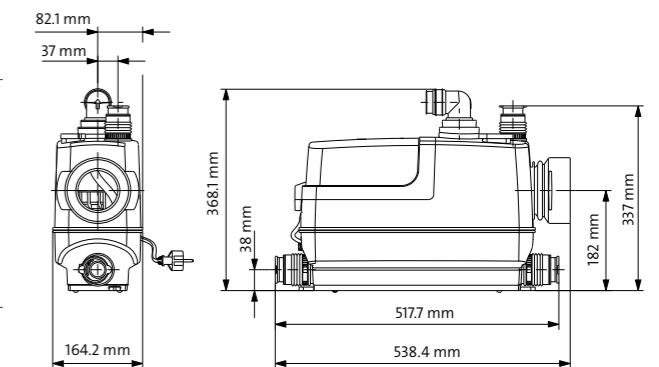
Power Supply Voltage	220-240 Volt, 50 Hz
Power Supply Cable	1.2 m with plug
Enclosure Class	Requires indoor installation (IP44)
Approvals and Markings	WaterMark Approved C-Tick Compliance

### PHYSICAL ATTRIBUTES

#### SOLOLIFT2 WC-1 & WC-3



#### SOLOLIFT2 CWC-3



Model	Power (kW) P1 / P2	Connections						Weight (kg)
		Inlet (Toilet)	Inlet (Top)	Inlet (Right)	Inlet (Left)	Outlet (Top)	Outlet (Side)	
SOLOLIFT2 WC-1	0.62 / 0.42	100 mm	32/36/40 mm	-	-	22-40 mm	22-40 mm	7
SOLOLIFT2 WC-3	0.62 / 0.42	100 mm	32/36/40 mm	36/40/50 mm	36/40/50 mm	22-40 mm	22-40 mm	7
SOLOLIFT2 CWC-3	0.62 / 0.42	100 mm	36/40 mm	36/40/50 mm	-	22-40 mm	-	7

# SOLOLIFT2 C-3 & D-2

COMPACT GREY WATER HANDLING STATION



## WATER SOURCE



Grey Water

## APPLICATION



Grey Water Handling



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos SOLOLIFT2 C-3 & D-2 lifting stations are compact, all-in-one pumping units designed for the effective handling of grey water from bathrooms, kitchens or laundries. Designed to be installed below street level or away from existing sewerage pipework.

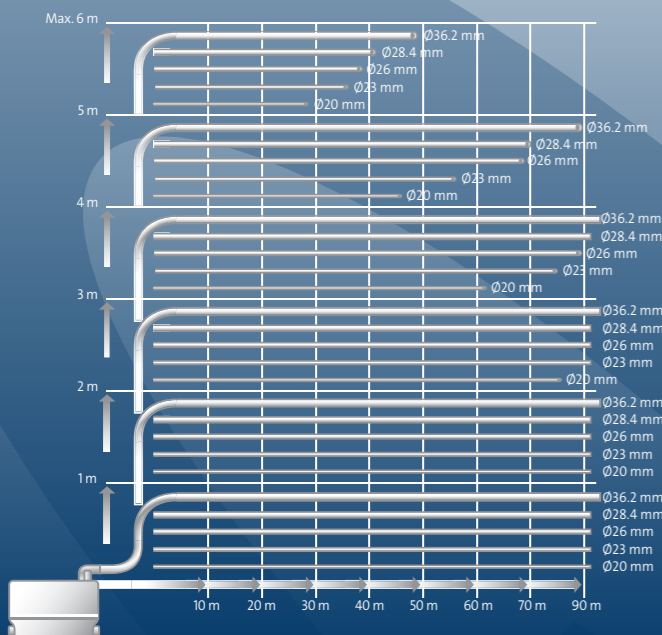
- **Space saving design fits small spaces** - Compact units making them suitable for installation in to small areas
- **Low installation costs** - Plumbing connections are adjustable up to 10 mm, making installation to existing or new pipework simple and inexpensive
- **Very low maintenance** - Thanks to separated motor, pump and tank the D-2 and C-3 are very easy to maintain. Most blockages can be cleared without the need to open the units.

**SOLOLIFT2 C-3** - Suitable for connection to a maximum of three appliances, including hand basins, showers, bathtubs or kitchen sinks, as well as to washing machines and dishwashers, where high temperature water may enter the system

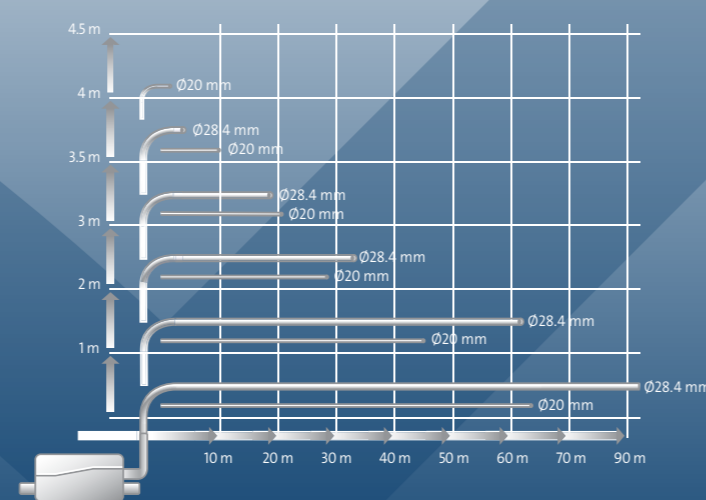
**SOLOLIFT2 D-2** - Suitable for connection to a maximum of two appliances such as hand basins and showers



## PUMP SIZING - SOLOLIFT2 C-3



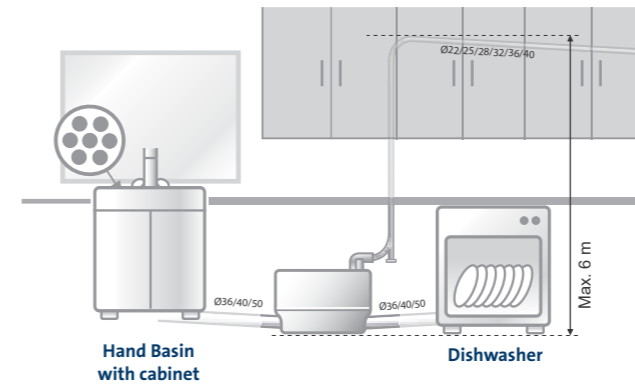
## PUMP SIZING - SOLOLIFT2 D-2



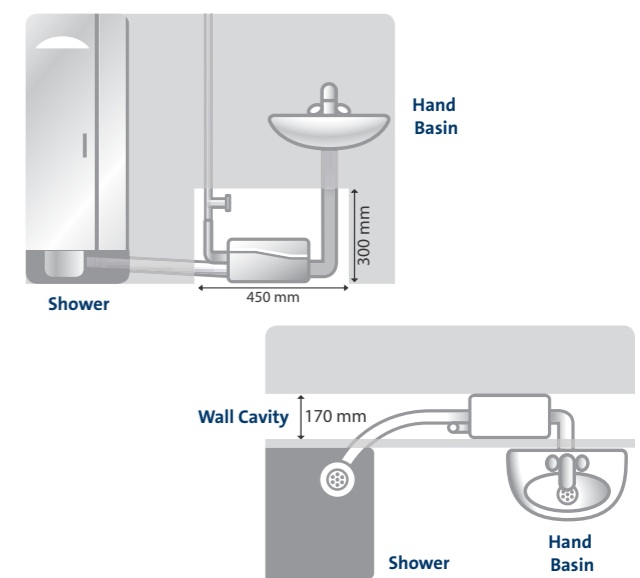
## TECHNICAL DATA

### INSTALLATION SCHEMATIC\*

#### SOLOLIFT2 C-3



#### SOLOLIFT2 D-2



\*Illustrative purposes only

### OPERATING CONDITIONS

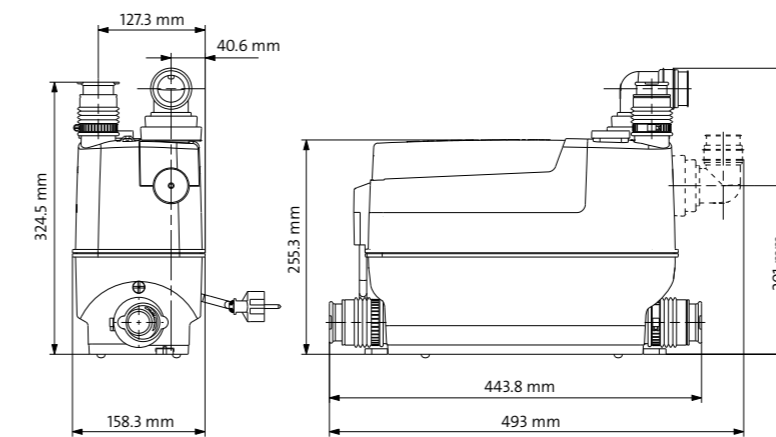
<b>Liquid Temperature</b>	SOLOLIFT2 C-3: 0°C to +75°C (90°C 30 mins) SOLOLIFT2 D-2: 0°C to +50°C
<b>pH value of pumped liquid</b>	4-10
<b>Tank Volume</b>	SOLOLIFT2 C-3: 5.7 litres SOLOLIFT2 D-2: 2.0 litres
<b>Sound Pressure</b>	Max. 70 dB

### TECHNICAL DATA

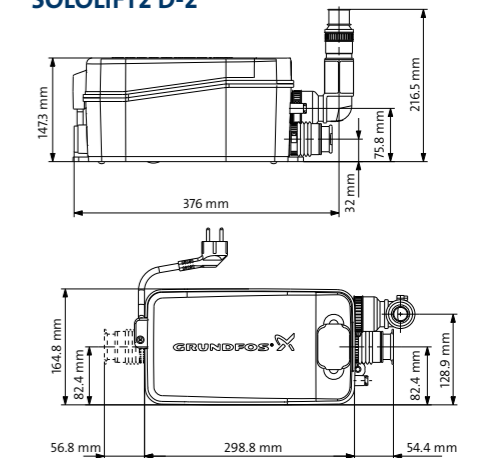
<b>Power Supply Voltage</b>	220-240 Volt, 50 Hz
<b>Power Supply Cable</b>	1.2 m with plug
<b>Enclosure Class</b>	Requires indoor installation (IP44)
<b>Approvals and Markings</b>	WaterMark Approved C-Tick Compliance

### PHYSICAL ATTRIBUTES

#### SOLOLIFT2 C-3



#### SOLOLIFT2 D-2



Model	Power (kW) P1 / P2	Connections					Weight (kg)	
		Inlet (Toilet)	Inlet (Top)	Inlet (Right)	Inlet (Left)	Outlet (Top)		Outlet (Side)
SOLOLIFT2 C-3	0.64 / 0.42	100 mm	32/36/40 mm	36/40/50 mm	36/40/50 mm	22/25/28/ 32/36/40 mm	22/25/28/ 32/36/40 mm	7
SOLOLIFT2 D-2	0.28 / 0.16	100 mm	-	36/40 mm	36/40 mm	-	22/32 mm	5

# LC231



## LEVEL CONTROL UNIT WITH BLUETOOTH® CONNECTIVITY

The LC231 automatically turns your pump/s on and off according to the liquid level measured by float switches or a level transmitter.



- **Flexible control** - Control one or two pumps for pit emptying or tank filling purposes. Suits single or three phase power.
- **Added Protection** - Built-in certified motor protection warns in the event of current overload, overheating, too many restarts, missing phase, sensor failure and more.
- **Bluetooth® connectivity** - For easy commissioning and monitoring use the Grundfos GO App on your mobile device or tablet to connect via Bluetooth® to the control unit.

Use the Go App to:

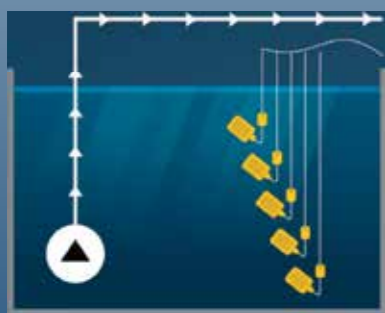
- monitor fluid level;
- monitor and reset alarms;
- add and select floats/transmitter;
- set stop/start levels;
- other advanced settings



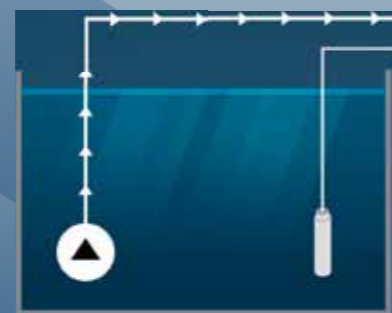
- **Configurable inputs/outputs** - A number of available inputs and outputs allow for extra sensors and alarms to be added
- **Easy to read control panel** - Use the control unit front panel to visually monitor general operation, set fluid levels and re-set alarms
- **Remote management connectivity** - Add BMS CIM Card for intergration with SCADA and other cloud services.

### APPLICATIONS

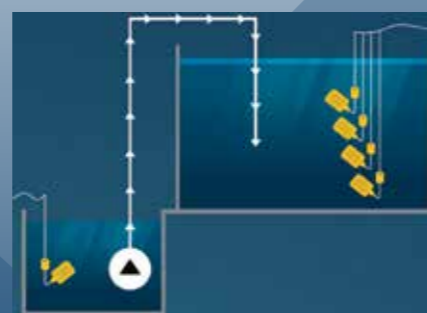
EMPTYING (FLOAT SWITCHES)



EMPTYING (TRANSMITTER)



FILLING (FLOAT SWITCHES)



### OPERATING CONDITIONS

Ambient Temperature	-25°C to +45°C
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### TECHNICAL DATA

Power Supply Voltage	Single Phase: 110-240 Volt, 50 Hz Three Phase: 200-415 Volt, 50 Hz
Enclosure Class	Undercover installation recommended (IP54)

# HOT WATER & HEATING



The Grundfos Circulator range provides solutions for hot water pressure boosting, hot water circulation to provide instant hot water and for heating applications.

## RANGE AT A GLANCE

	UPA N Page 56	UP N Page 58	UPS N Page 62	COMFORT PM Page 64	ALPHA2 N Page 68	UPS Page 60	ALPHA2 Page 66
Water Source	Hot Water	Hot Water	Hot Water	Hot Water	Hot Water	Hot Water	Hot Water
Application	Mains Boosting		Hot Water Circulation		Hot Water Circulation		Heating
Approved for Drinking Water AS/NZS 4020	•	•	•	•	•		
Pump Material	Stainless Steel	Stainless Steel	Stainless Steel	Brass	Stainless Steel	Cast Iron	Cast Iron
Max. Head	9 m	4 m	7.5 m	1.2 m	6 m	6 m	9 m
Max. Flow	26 l/min	48 l/min	68 l/min	8 l/min	53 l/min	53 l/min	180 l/min
Max. Liquid Temp	95°C	110°C	110°C	95°C	110°C	110°C	110°C
Operation Modes	Auto/ Manual/Off	Fixed Speed	3 Speed	Fixed Speed AUTOADAPT	AUTOADAPT 3 Speed	Variable/ 3 Speed	AUTOADAPT 3 Speed

# UPA N

## HOT WATER PRESSURE BOOSTER



### WATER SOURCE



Hot Water

### APPLICATION



Hot Water Boosting



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos UPA N is an ultra quiet, compact domestic pressure booster pump designed to increase existing pressure to a single hot water outlet in the home.

- **Increase hot water pressure for a single tap** - Ultra quiet, compact domestic pressure booster pump designed to increase existing pressure to a single hot water outlet
- **Hygienic, stainless steel construction throughout**
- **Built-in controller, so no extra wiring required**
- **Ultra quiet operation** - Very quiet operation that won't disturb your family
- **Simple to use** - In AUTO mode the pump is operated via a built-in flow switch, which starts and stops the pump only when the tap is turned on or off. In MANUAL mode the pump will operate continuously.

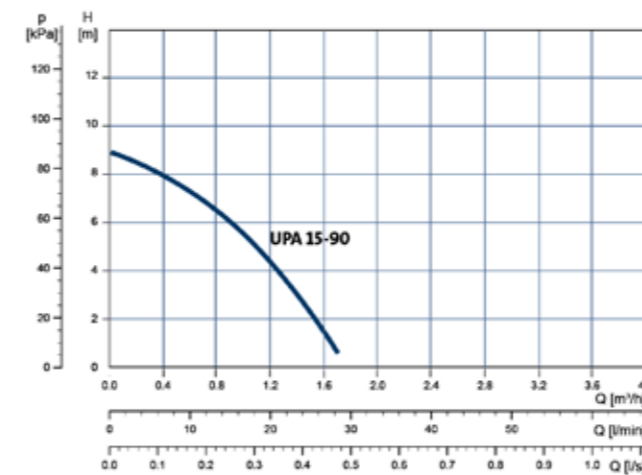


**UPA 15-90 N**

Adds 50 kPa pressure for one tap

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



### INSTALLATION NOTES



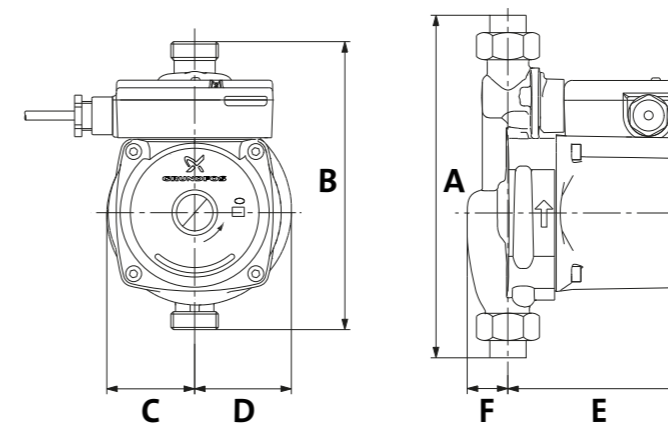
### OPERATING CONDITIONS

Ambient Temperature	0°C to +40°C
Liquid Temperature	+2°C to +95°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

### TECHNICAL DATA

Power Supply Voltage	230 Volt, 50 Hz
Power Supply Cable	1.2 m with plug
Enclosure Class	Undercover installation recommended (IPX2D)

### PHYSICAL ATTRIBUTES



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)						Weight (kg)
			A (Port to Port)	B (h)	C (w1)	D (w2)	E (d1)	F (d2)	
UPA N 15-90	0.12	3/4"	214	160	50	54	103	23	3

# UP N

## STAINLESS STEEL HOT WATER CIRCULATOR



### WATER SOURCE



Hot Water

### APPLICATION



Hot Water Circulation

The Grundfos UP N is an ultra quiet, compact domestic hot water circulation pump designed to pump hot water around the home, making it instantly available for taps in the bathroom, kitchen or anywhere hot water is required.

- **Instant hot water at the tap** - As circulators provide instant hot water at the tap (with return line), they can save hundreds of litres per year from going down the drain while you wait for hot water to arrive from your hot water system
- **Hygienic, stainless steel construction throughout**
- **Ultra quiet operation** - Very quiet operation that won't disturb your family



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



UP N 20 mm Union Set available separately



### PUMP SIZING

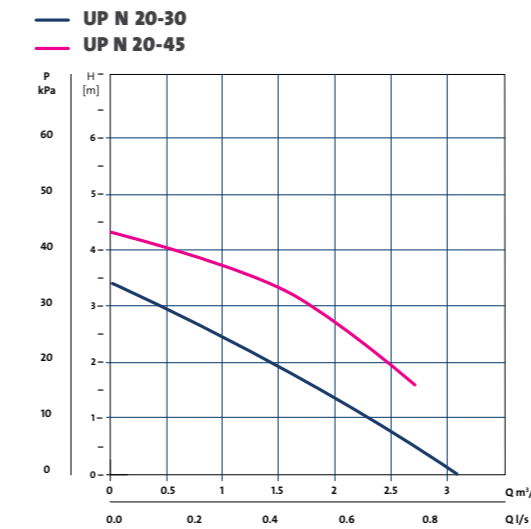
#### Sizing assumptions:

- Uninsulated pipework
- Tempering valve installed
- 20 elbows and 10 tees
- 5°C temperature drop
- Electric storage hot water system

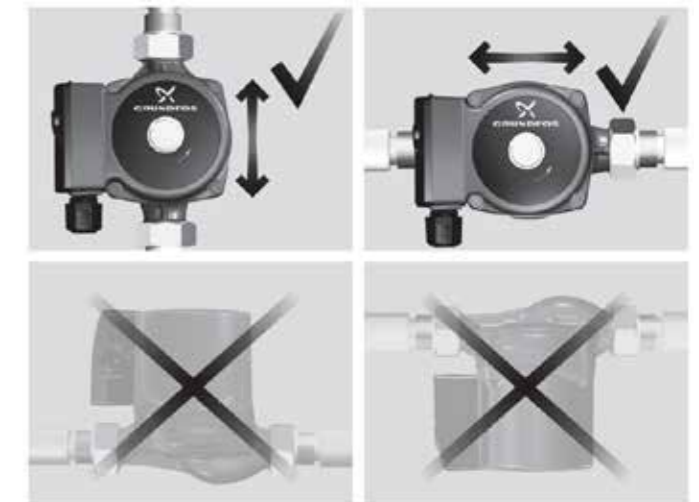
	UP N 20-30 150	UP N 20-45 150
20 mm Pipework		
Maximum System Pipework Length	25 m	75 m

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



### INSTALLATION NOTES



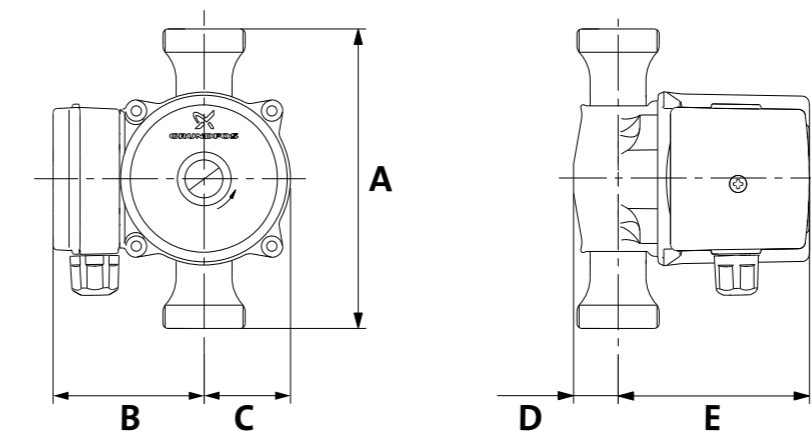
### OPERATING CONDITIONS

Ambient Temperature	0°C to +40°C
Liquid Temperature	+2°C to +110°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

### TECHNICAL DATA

Power Supply Voltage	240 Volt, 50 Hz
Power Connection	Installation by qualified electrician
Enclosure Class	Undercover installation recommended (IP44)

### PHYSICAL ATTRIBUTES



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)					Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	
UP N 20-30 150	0.09	1 1/4"	150	75	43	28	100	2
UP N 20-45 150	0.12	1 1/4"	150	85	54	25	126	4

# UPS

THREE SPEED, CAST IRON HOT WATER CIRCULATOR



## WATER SOURCE



## APPLICATION



The Grundfos UPS is an ultra quiet, compact hot water circulation pump designed for operation in a closed loop heating system.

- **Ideal for heating systems** - Perfect for large home, hot water radiator heating systems
- **Ultimate heating system control** - Comes with a built-in 3 speed controller which provides the ultimate in heating system flexibility and control
- **Ultra quiet operation** – Very quiet operation that won't disturb your family

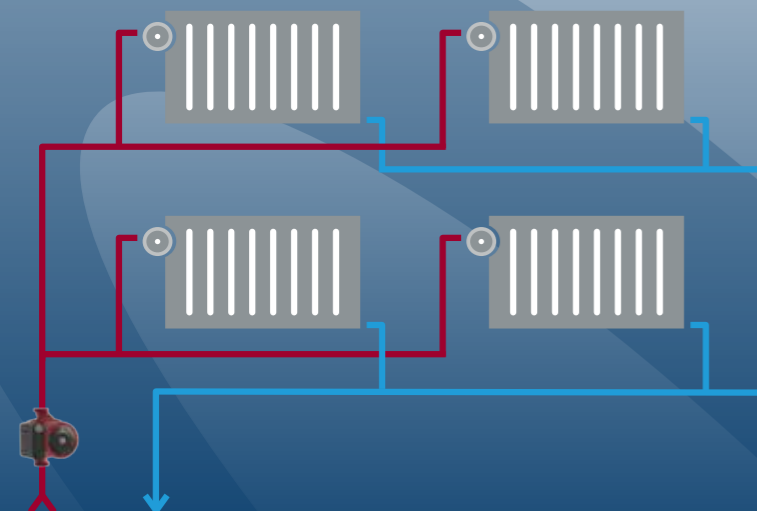


SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

UPS 25 mm & 32 mm Union Sets available separately



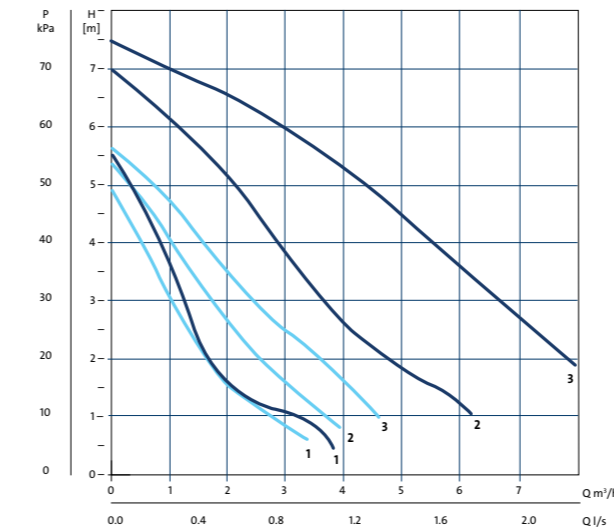
## TYPICAL HEATING SYSTEM INSTALLATION



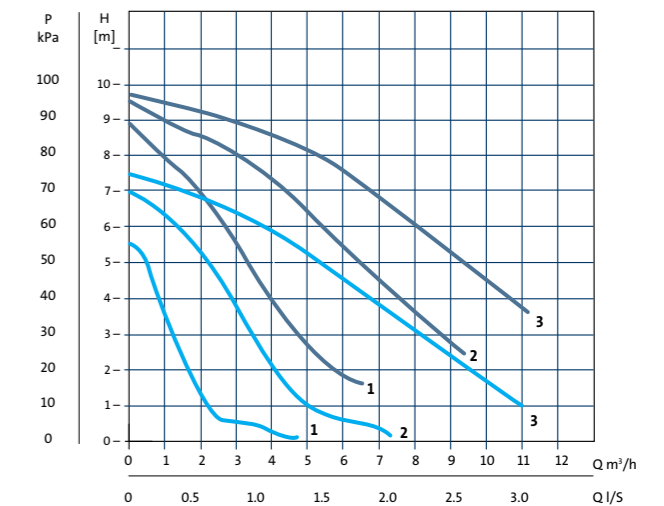
## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE

— UPS 25-60 SPEED 1,2,3  
— UPS 25-80 SPEED 1,2,3



— UPS 25-100, UPS 32-100  
— UPS 32-80



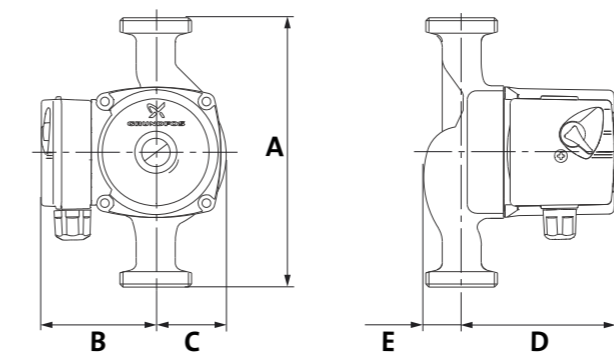
### OPERATING CONDITIONS

Ambient Temperature	+0°C to +40°C
Liquid Temperature	-10°C to +110°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

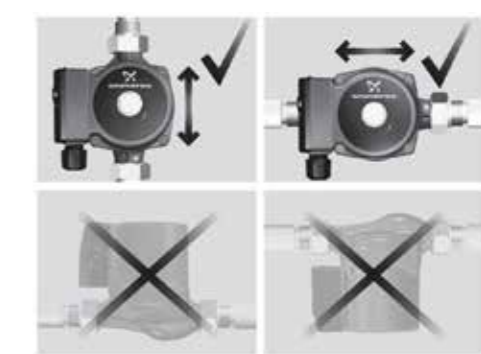
### TECHNICAL DATA

Power Supply Voltage	230 Volt, 50 Hz
Power Connection	Installation by qualified electrician
Enclosure Class	Undercover installation recommended (IP44)

### PHYSICAL ATTRIBUTES



### INSTALLATION NOTES



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)					Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	
UPS 25-60 130	0.07	1 1/2"	130	75	51	32	102	2
UPS 25-60 180	0.06	1 1/2"	180	75	51	32	102	3
UPS 25-80 180	0.17	1 1/2"	180	85	62	46	125	4
UPS 32-80 180	0.22	2"	180	85	62	48	125	5
UPS 25-100 180	0.35	1 1/2"	180	90	68	47	150	6
UPS 32-100 180	0.35	2"	180	90	68	47	150	6

# UPS N

THREE SPEED, STAINLESS STEEL  
HOT WATER CIRCULATOR



## WATER SOURCE



Hot Water

## APPLICATION



Hot Water Circulation

The Grundfos UPS N is an ultra quiet, compact domestic circulation pump, designed to pump hot water around the home, making it instantly available for taps in the bathroom, kitchen or anywhere hot water is required.



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



UPS N 20 mm, 25 mm & 32 mm Union Sets available separately



## PUMP SIZING

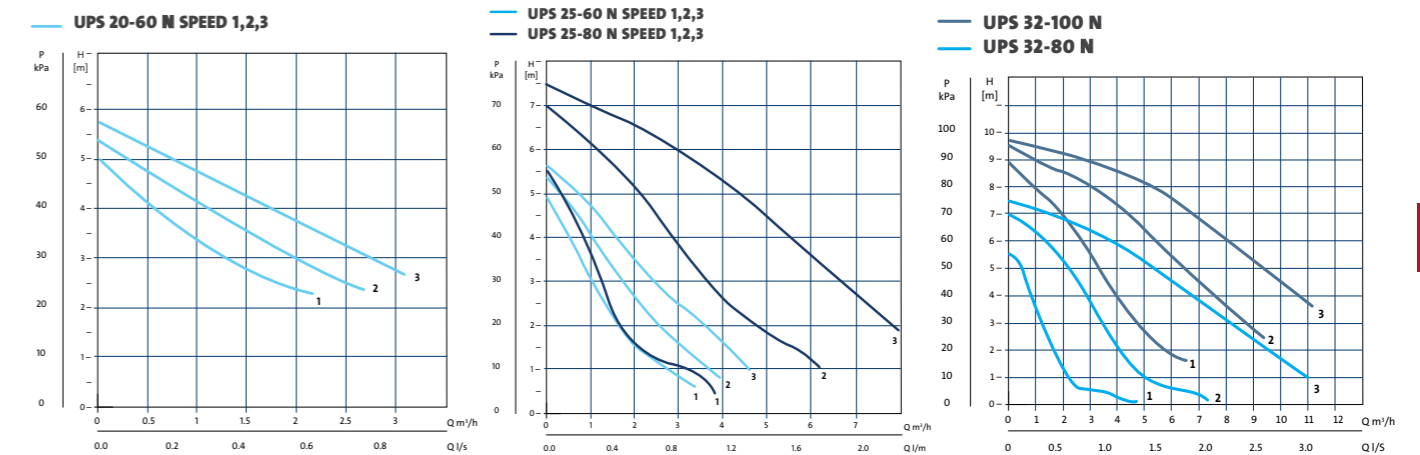
	UPS 20-60 N 150	UPS 25-60 N 180	UPS 25-80 N 180	UPS 32-80 N 180	UPS 32-100 N 180
	20 mm Pipework	25 mm Pipework		32 mm Pipework	
	Maximum System Pipework Length				
<b>Speed 1</b>		70 m	80 m	75 m	175 m
<b>Speed 2</b>	55 m	95 m	120 m	150 m	190 m
<b>Speed 3</b>	75 m	95 m	130 m	170 m	200 m

### Sizing assumptions:

- Uninsulated pipework
- Tempering valve installed
- 20 elbows and 10 tees
- 5°C temperature drop
- Electric storage hot water system

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



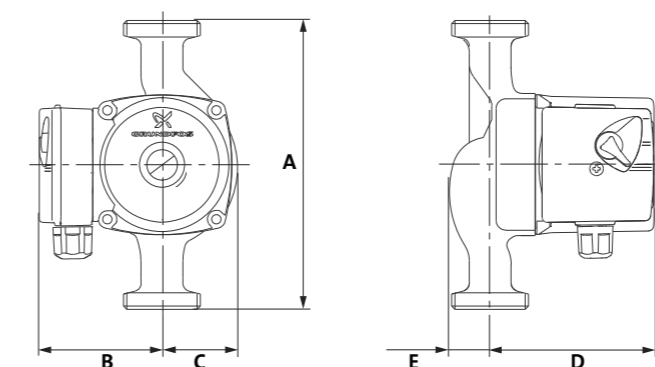
### OPERATING CONDITIONS

Liquid Temperature	+2°C to +110°C
Ambient Temperature	0°C to +40°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

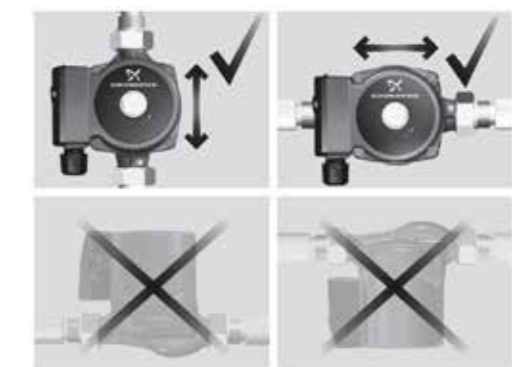
### TECHNICAL DATA

Power Supply Voltage	240 Volt, 50 Hz
Power Connection	Installation by qualified electrician
Enclosure Class	Undercover installation recommended (IP44)

### PHYSICAL ATTRIBUTES



### INSTALLATION NOTES



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)					Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	
UPS 20-60 N 150	0.09	1 1/2"	150	75	51	28	102	3
UPS 25-60 N 180	0.06	1 1/2"	180	75	51	32	102	3
UPS 25-80 N 180	0.17	1 1/2"	180	85	62	46	125	4
UPS 32-80 N 180	0.22	2"	180	85	62	48	125	5
UPS 32-100 N 180	0.35	2"	180	90	68	47	150	6



# COMFORT PM

HIGH EFFICIENCY, DOMESTIC HOT WATER CIRCULATOR



## WATER SOURCE



Hot Water

## APPLICATION



Hot Water Circulation



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos COMFORT PM is an ultra quiet, ultra energy efficient, domestic hot water circulation pump designed to circulate hot water around the home, making it instantly available for taps in the bathroom, kitchen and anywhere hot water is required.

- **Instant hot water at the tap** - As circulators provide instant hot water at the tap (with return line), they can save hundreds of litres per year from going down the drain while you wait for hot water to arrive from your hot water system
- **Energy efficient** - The AUTOADAPT feature “learns” the hot water consumption pattern of the home and then varies pump use accordingly in the future, providing high levels of energy efficiency compared to other circulators that run continuously
- **Low running costs** - Comes with a highly efficient permanent magnet motor that helps to save power and lower running costs
- **Ultra quiet operation** - Very quiet operation that won't disturb your family



COMFORT PM

COMFORT PM WITH AUTOADAPT

## PUMP SIZING

### Sizing assumptions:

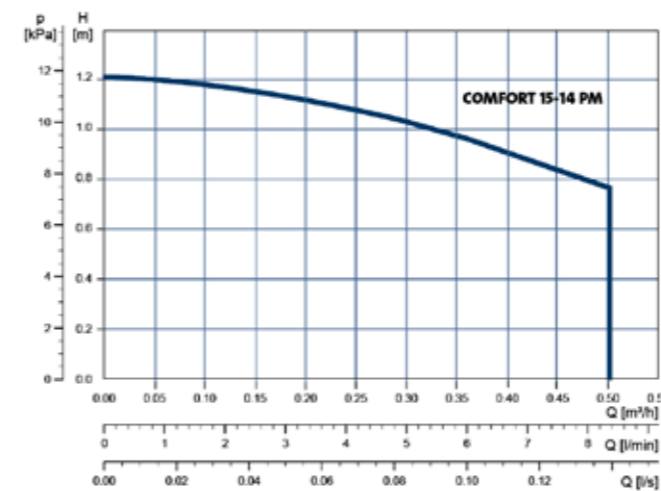
- Uninsulated pipework
- 20 elbows and 10 tees
- 5°C temperature drop
- Electric storage hot water system

COMFORT PM 15-14	
15 mm Pipework	
Maximum System Pipework Length	30 m

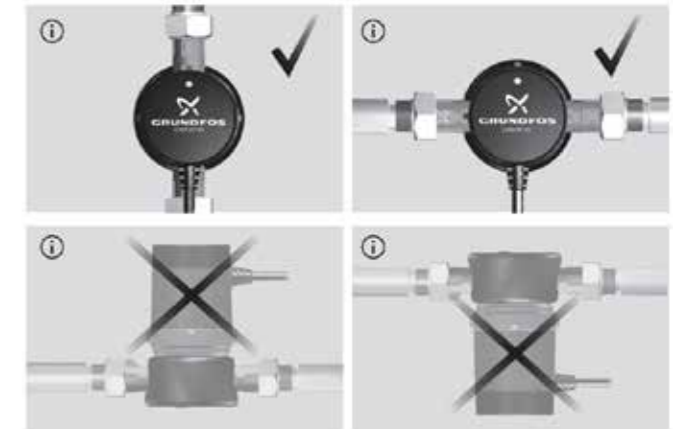
Comfort PM is not suitable for installation with tempering valve

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



### INSTALLATION NOTES



### OPERATING CONDITIONS

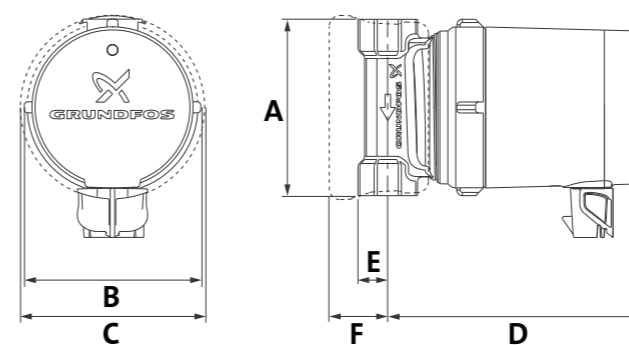
Ambient Temperature	0°C to +40°C
Liquid Temperature	+2°C to +95°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

### TECHNICAL DATA

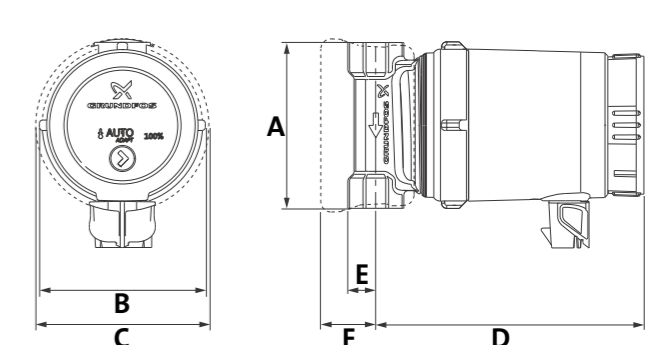
Power Supply Voltage	230 Volt, 50 Hz
Power Connection	Comes with Alpha plug Initial installation by qualified electrician
Enclosure Class	Undercover installation recommended (IP44)

### PHYSICAL ATTRIBUTES

#### COMFORT PM B



#### COMFORT PM BA (AUTOADAPT)



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)						Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	F (d3)	
COMFORT 15-14 B PM GB	0.07	½"	80	79.5	84	119	13.5	25	1
COMFORT 15-14 BA PM GB	0.07	½"	80	79.5	84	129	13.5	25	1

# ALPHA2

MULTI-SPEED, CAST IRON HOT WATER CIRCULATOR



## WATER SOURCE



Hot Water

## APPLICATION



Heating

The Grundfos ALPHA2 is an ultra quiet, compact hot water circulation pump designed for operation in a closed loop heating system.

- **Ideal for heating systems** - Perfect for large home, hot water radiator heating systems
- **Energy efficient** - The AUTOADAPT feature "learns" the hot water circulation patterns of the home heating system and then varies pump use accordingly in the future
- **Ultra quiet operation** - Very quiet operation that won't disturb your family



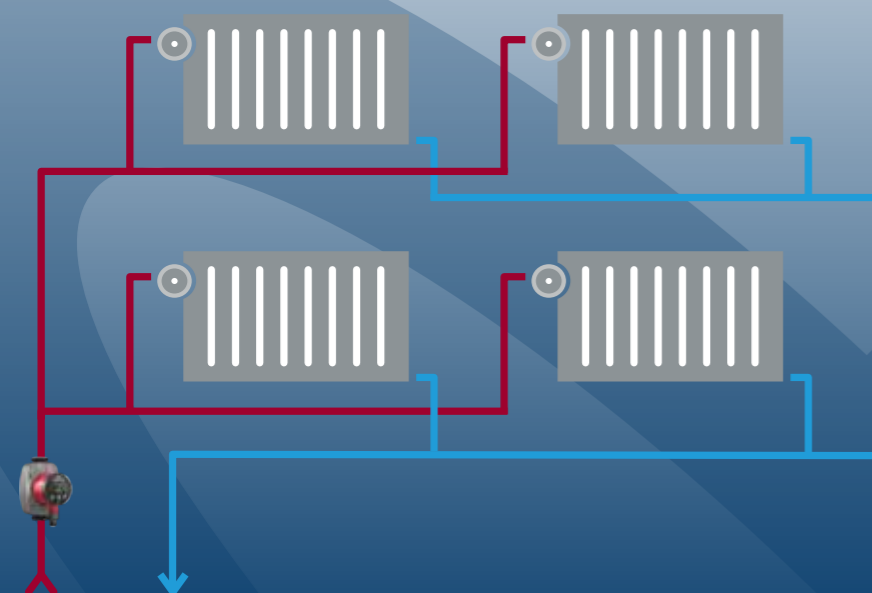
SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER



ALPHA2 25 mm Union Set available separately

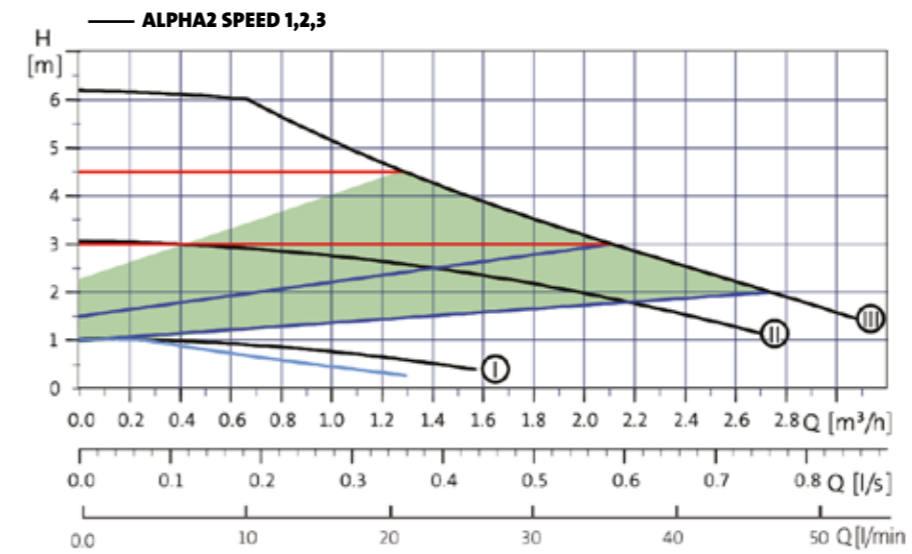


## TYPICAL HEATING SYSTEM INSTALLATION



## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



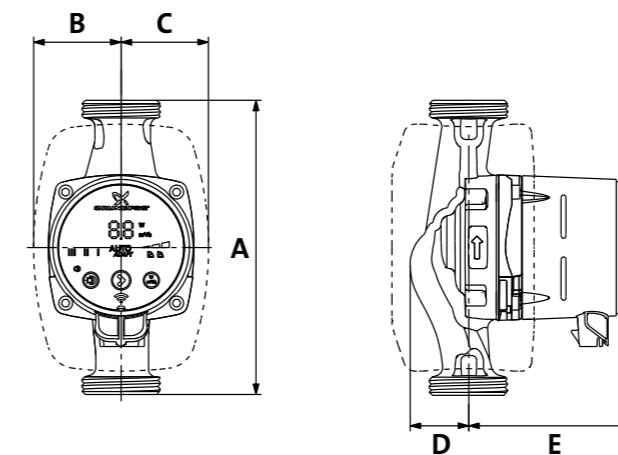
### OPERATING CONDITIONS

Ambient Temperature	0°C to +40°C
Liquid Temperature	+2°C to +110°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

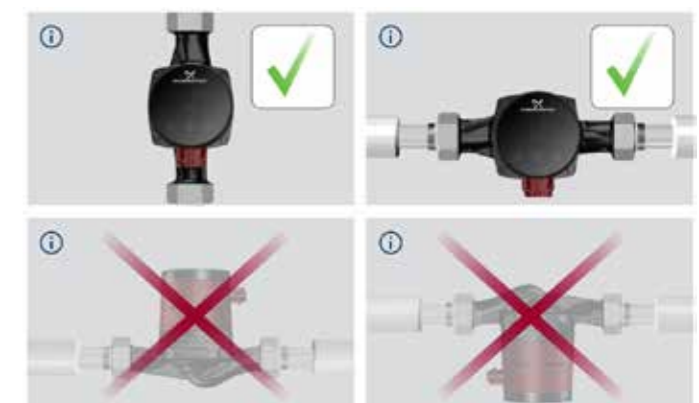
### TECHNICAL DATA

Power Supply Voltage	230 Volt, 50/60 Hz
Power Connection	Comes with Alpha plug Initial installation by qualified electrician
Enclosure Class	Undercover installation recommended (IPX4D)

### PHYSICAL ATTRIBUTES



### INSTALLATION NOTES



Model	Power Input P1 (kW)	Pipe Connections	Dimensions (mm)					Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	
ALPHA2 25-60 130	0.03	1 1/2"	130	54	54	37	104	2
ALPHA2 25-60 180	0.03	1 1/2"	180	54	54	37	104	2

# ALPHA2 N

MULTI-SPEED, STAINLESS STEEL  
HOT WATER CIRCULATOR



## WATER SOURCE



Hot Water

## APPLICATION



Hot Water Circulation



SCAN THE QR CODE TO LINK TO GRUNDFOS PRODUCT CENTER

The Grundfos ALPHA2 N is an intelligently controlled, ultra quiet, hot water circulation pump designed to circulate hot water around the home, making it instantly available for taps in the bathroom, kitchen or anywhere hot water is required.

- **Instant hot water at the tap** - As circulators provide instant hot water at the tap (with return line), they can save hundreds of litres per year from going down the drain while you wait for hot water to arrive from your hot water system
- **Energy efficient** - the AUTOADAPT feature “learns” the hot water consumption pattern of the home and then varies pump use accordingly in the future, providing superior levels of energy efficiency compared to other circulators that run continuously
- **Hygienic, stainless steel construction throughout**
- **Ultra quiet operation** – Very quiet operation that won't disturb your family



ALPHA2 N 25 mm Union Set available separately



## PUMP SIZING

### Sizing assumptions:

- Uninsulated pipework
- Tempering valve installed
- 20 elbows and 10 tees
- 5°C temperature drop
- Electric storage hot water system

### ALPHA2 25-60

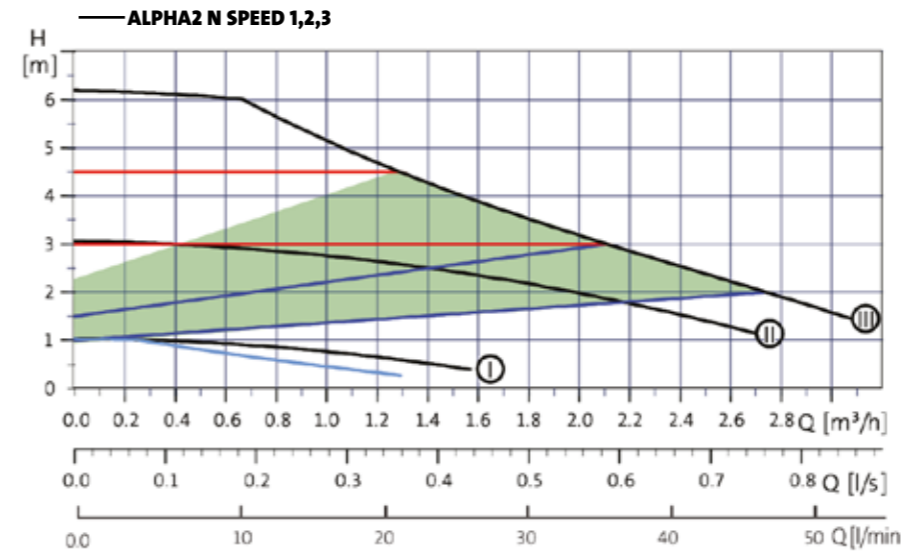
25 mm Pipework

Maximum System Pipework Length

110 m

## TECHNICAL & PERFORMANCE DATA

### PERFORMANCE CURVE



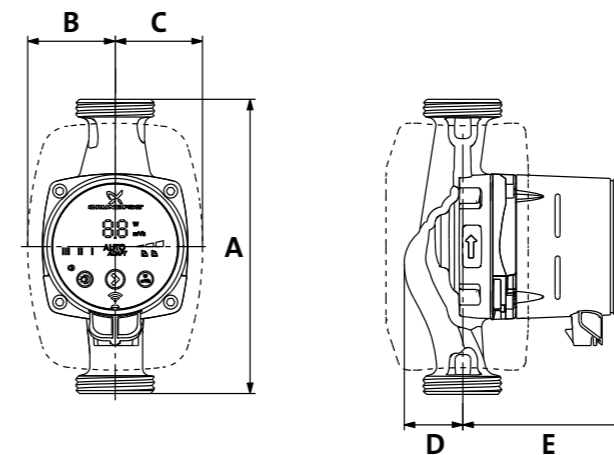
### OPERATING CONDITIONS

Ambient Temperature	0°C to +40°C
Liquid Temperature	+2°C to +110°C
System Pressure	Max. 10 bar
Sound Pressure	Max. 43 dB

### TECHNICAL DATA

Power Supply Voltage	230 Volt, 50/60 Hz
Power Connection	Comes with Alpha plug Initial installation by qualified electrician
Enclosure Class	Undercover installation recommended (IPX4D)

### PHYSICAL ATTRIBUTES



### INSTALLATION NOTES



Model	Motor Power P1 (kW)	Pipe Connections	Dimensions (mm)					Weight (kg)
			A (Port to Port)	B (w1)	C (w2)	D (d1)	E (d2)	
ALPHA2 25-60 N 130	0.03	1 ½"	130	54	54	37	104	2
ALPHA2 25-60 N 180	0.03	1 ½"	180	54	54	37	104	2

# PROTECTIONS

Grundfos pumps feature a range of protection functions which are defined below. See individual product pages for a list of relevant pump protections.



## MAX CONTINUOUS RUN TIME

If the pump runs continuously for more than 30 minutes the motor will be stopped and alarm activated. Could indicate a pipe fracture or outlet left unattended.



## ANTI-CYCLING PROTECTION

The pump will be stopped and alarm activated if it repeatedly turns on and off over a short period of time (called 'cycling'), which could indicate a leaking pipe or dripping tap.



## DRY-RUN PROTECTION

The pump will be stopped if no water is detected at the inlet, preventing internal damage and protecting your motor from damage.



## CURRENT OVERLOAD PROTECTION

The single phase motor will stop automatically if a current overload event occurs and will restart once normal current is restored - protecting your motor from damage.



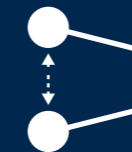
## THERMAL OVERLOAD PROTECTION

The single phase motor will stop automatically if it overheats and will restart once it cools down - protecting your motor from damage.



## POWER FAILURE LED

Indicates the incoming voltage supply is outside the acceptable range 150 V - 400 V (SCALA2 only).



## FLOAT SWITCH

External float that either turns your pump on or off based on the water level - this prevents either overflowing (UNILIFT) or dry-running (SB/SBA).



## GRUNDFOS EYE

Provides dynamic pump status operator feedback such as: power on, pump running and any alarms or faults.



## LED STATUS INDICATORS

Either shown via LED lights or 'Grundfos Eye' indicator that shows whether the pump has power to it, is currently running or whether a protection feature has been activated (alarm)



## PUMP BLOCKED LED

Indicates that there is debris or impurities blocking the pump. (SCALA2 only)



## TEMPERATURE LED

Indicates that the water temperature is over the acceptable range (45°C) and the pump has been stopped. If the water temperature nears freezing point the pump will cycle to prevent the water freezing inside the body (SCALA2 only).



## MAX PRESSURE EXCEEDED LED

Maximum pressure accepted by the pump has been exceeded at the inlet (SCALA2 only).

# CONTROLS

Grundfos pumps feature a range of control functions which are defined below. See individual product pages for a list of relevant pump controls



## ADJUSTABLE START PRESSURE

The pump controller allows for the starting pressure to be adjusted up or down as required. SCALA2 and CME Booster have a simple up/down press button control.



## AUTOMATIC RESTART

The pump will automatically restart after a protection feature has stopped the pump, such as anti-cycling or dry-run alarms.



## AUTO START/STOP

The pump will automatically start and stop when outlets (eg: taps) are turned on or off.

# CONVERSION TABLES

## UNITS OF PRESSURE

CONVERT TO	Multiply By					
CONVERT FROM	Kilopascal	Metrehead	Bar	bs per sq. inch	Feet of Water	Atmosphere
Kilopascal kPa	1	0.102	0.01	0.145	0.335	-
Metrehead m	9.804	1	0.098	1.42	3.28	0.098
Bar bar	100	10.20	1	14.5	33.15	1
lbs/sq inch psi	6.895	0.704	0.069	1	2.307	0.069
Feet of Water ft	2.98	0.3048	0.03	0.4335	1	0.03
Atmosphere At	100	10.33	1.0	14.7	33.9	1

## NOZZLE FLOW RATES (litres/sec)

Pressure	Diameter of Nozzle (inches) mm										
			5/64"	5/32"	1/4"	5/16"	25/64"	15/32"	5/8"	25/32"	1"
	kPa	psi	2	4	6	8	10	12	16	20	25
200	29	0.06	0.25	0.56	1.01	1.57	2.26	4.02	6.29	9.82	
300	43	0.08	0.31	0.69	1.23	1.93	2.77	4.93	7.70	12.03	
400	58	0.09	0.36	0.80	1.42	2.22	3.20	5.69	8.89	13.89	
500	73	0.10	0.40	0.89	1.59	2.48	3.58	6.36	9.94	15.53	
600	87	0.11	0.43	0.98	1.74	2.72	3.92	6.97	10.89	17.02	
700	102	0.12	0.47	1.06	1.88	2.94	4.23	7.53	11.76	18.38	
800	116	0.12	0.50	1.13	2.01	3.14	4.53	8.05	12.58	19.65	
900	131	0.13	0.53	1.20	2.13	3.33	4.80	8.54	13.34	20.84	
1000	145	0.14	0.56	1.26	2.25	3.52	5.06	9.00	14.06	21.97	

## UNITS OF FLOW RATE

CONVERT TO	Multiply By				
CONVERT FROM	Imperial Gallons per min	US Gallons per min	Cubic metres per hour	Litres per second	Litres per minute
Imperial Gallons per min	1	1.2	0.273	0.076	4.546
US Gallons per min	0.833	1	0.227	0.063	3.787
Cubic Metres per hour	3.666	4.4	1	0.278	16.66
Litres per second	13.19	15.85	3.6	1	60
Litres per minute	0.219	0.264	0.06	0.016	1

## UNITS OF LENGTH

CONVERT TO	Multiply By						
CONVERT FROM	Millimetre	Centimetre	Metre	Kilometre	Inch	Foot	Mile
Millimetre mm	1	0.1	0.001	-	0.0394	0.0033	-
Centimetre cm	10	1	0.01	-	0.394	0.0328	-
Metre m	1000	100	1	0.001	39.37	3.281	0.000621
Kilometre km	-	-	1000	1	-	3281	0.621
Inch in	25.4	2.54	0.0254	-	1	0.083	-
Feet ft	304.8	30.48	0.305	-	12	1	-
Mile mile	-	-	1610	1.61	-	5280	1

## UNITS OF VOLUME

CONVERT TO	Multiply By				
CONVERT FROM	Litre	Kilolitre	Cubic metres	Imperial Gallon	US Gallon
Litre l	1	0.001	0.001	0.220	0.264
Kilolitre klt	1000	1	1	220	264
Cubic metre m³	1000	1	1	220	264
Imperial Gallon gal	4.546	0.00454	0.00454	1	1.201
US Gallon (US) gal	3.785	0.0038	0.0038	0.833	1

Note: The information provided on these pages is for guidance only. Grundfos Pumps Aust Ltd accepts no responsibility for the misuse or misapplication of this information.

## POLYETHYLENE PIPE FRICTION LOSS METRIC (AS/NZS 4130)

Flow rate		Friction Loss (metres/100 metres of pipe)							
l/s	l/min	OD 32MM 5/32"		OD 40mm 5/16"		OD 50mm 15/32		OD 63mm 25/32"	
		PN6.3	PN12.5	PN6.3	PN12.5	PN6.3	PN12.5	PN6.3	PN12.5
0.4	24	2.08	3.99	0.73	1.39	0.25	0.48	0.09	0.16
0.5	30	3.07	5.9	1.08	2.05	0.37	0.7	1.13	0.24
0.6	36	4.24	8.14	1.49	2.82	0.51	0.97	1.17	0.32
0.7	42	5.56	10.7	1.95	3.7	0.67	1.27	1.22	0.43
0.8	48	7.05	13.56	2.47	4.69	0.85	1.61	1.28	0.54
0.9	54	8.68	16.72	3.04	5.78	1.04	1.98	1.35	0.66
1	60	10.47	20.17	3.66	6.96	1.26	2.38	1.42	0.8
1.2	72	14.48	27.93	5.06	9.63	1.73	3.29	1.58	1.1
1.4	84	19.07	36.80	6.66	12.67	2.28	4.33	1.75	1.44
1.6	96	24.21	46.76	8.45	16.09	2.89	5.49	1.96	1.83
1.8	108	29.91	57.79	10.42	19.86	3.56	6.77	2.18	2.25
2	120	36.13	69.86	12.58	23.99	4.3	8.17	2.42	2.71
2.5	150	54.00	104.53	18.77	35.82	6.4	12.18	3.11	4.04
3	180	75.05	-	26.05	49.75	8.87	16.89	4.29	5.6
3.5	210	-	-	34.39	65.74	11.69	22.29	5.85	7.38
4	240	-	-	43.77	83.73	14.86	28.35	7.89	9.37
4.5	270	-	-	54.17	-	18.38	35.07	10.4	11.59
5	300	-	-	65.57	-	22.22	42.44	13.7	14.01
5.5	330	-	-	77.69	-	26.40	50.44	17.66	16.63
6	360	-	-	-	-	30.90	59.07	22.13	19.46
6.5	390	-	-	-	-	35.72	68.31	27.49	22.49
7	420	-	-	-	-	40.86	-	33.38	25.72

## POLYETHYLENE PIPE FRICTION LOSS RURAL CLASS B

Flow rate		Friction Loss (metres/100 metres of pipe)				
l/s	l/min	3/4"	1"	1 1/4"	1 1/2"	2"
		0.4	24	11.8	2.9	1.0
0.5	30	20.8	5.1	1.7	0.7	0.2
0.6	36	-	7.8	2.6	1.1	0.3
0.7	42	-	9.1	3.0	1.3	0.3
0.8	48	-	12.7	4.3	1.7	0.5
0.9	54	-	14.3	4.9	1.9	0.5
1	60	-	18.5	6.2	2.6	0.6
1.2	72	-	27.1	9.5	4.0	1.0
1.4	84	-	31.6	11.1	4.6	1.2
1.6	96	-	-	15.5	6.3	1.5
1.8	108	-	-	17.4	7.1	1.7
2	120	-	-	-	9.6	2.4
2.5	150	-	-	-	13.0	3.4
3	180	-	-	-	-	4.7
3.5	210	-	-	-	-	6.2
4	240	-	-	-	-	8.5
4.5	270	-	-	-	-	9.6
5	300	-	-	-	-	-
5.5	330	-	-	-	-	-
6	360	-	-	-	-	-
6.5	390	-	-	-	-	-
7	420	-	-	-	-	-

## PVC PIPE FRICTION LOSS (AS/NZS 1477)

Flow rate		Friction Loss (metres/100 metres of pipe)									
l/s	l/min	Nom. 32mm 5/32"		Nom. 40mm 5/16"		Nom. 50mm 15/32		Nom. 80mm 25/32"		Nom. 100mm	
		PN9	PN12	PN9	PN12	PN9	PN12	PN9	PN12	PN9	PN12
0.4	24	0.48	0.54	0.25	0.29	0.09	0.1	-	-	-	-
0.5	30	0.70	0.80	0.37	0.42	0.13	0.14	-	-	-	-
0.6	36	0.97	1.10	0.51	0.58	0.17	0.2	-	-	-	-
0.7	42	1.27	1.44	0.66	0.77	0.23	0.26	-	-	-	-
0.8	48	1.61	1.82	0.84	0.97	0.29	0.33	-	-	-	-
0.9	54	1.98	2.24	1.03	1.19	0.35	0.4	0.06	0.06	-	-
1	60	2.38	2.70	1.24	1.43	0.42	0.48	0.07	0.08	-	-
1.2	72	3.29	3.74	1.72	1.98	0.59	0.67	0.09	0.11	-	-
1.4	84	4.33	4.91	2.25	2.60	0.77	0.88	0.12	0.14	-	-
1.6	96	5.49	6.23	2.86	3.30	0.97	1.11	0.15	0.18	-	0.05
1.8	108	6.77	7.68	3.52	4.06	1.20	1.37	0.19	0.22	0.06	0.06
2	120	8.17	9.27	4.25	4.90	1.45	1.65	0.23	0.26	0.07	0.08
2.5	150	12.18	13.83	6.33	7.30	2.15	2.45	0.34	0.39	0.1	0.12
3	180	16.89	19.18	8.77	10.12	2.97	3.4	0.46	0.53	0.14	0.16
3.5	210	22.29	-	11.56	13.35	3.92	4.47	0.61	0.70	0.18	0.21
4	240	-	-	14.70	16.98	4.98	5.68	0.77	0.89	0.23	0.26
4.5	270	-	-	18.18	20.99	6.15	7.02	0.95	1.1	0.29	0.33
5	300	-	-	-	-	7.43	8.49	1.15	1.32	0.34	0.39
5.5	330	-	-	-	-	8.82	10.07	1.37	1.57	0.41	0.47
6	360	-	-	-	-	10.32	11.78	1.60	1.83	0.48	0.55
7	420	-	-	-	-	13.62	15.59	2.11	2.42	0.63	0.72
8	480	-	-	-	-	-	19.82	2.68	3.07	0.8	0.91
9	540	-	-	-	-	-	24.54	3.31	3.8	0.98	1.13
10	600	-	-	-	-	-	29.71	4.0	4.59	1.19	1.36
11	660	-	-	-	-	-	-	4.75	5.46	1.41	1.62
12	720	-	-	-	-	-	-	5.56	6.39	1.65	1.89



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