



**MADE IN
BRITAIN**

AirBREAK Category 5 integrated tank and booster pump systems








AirBREAK

**A range of ultra-compact,
high-performance
Category 5 integrated tank
and booster pump systems.**

CONTENTS

- AIRBREAK MODELS	P.4
- MODEL NUMBER CONVENTION	P.4
- FC	P.5
- VC	P.11
- FQ	P.17
- VQ	P.23
- AIRBREAK INLET PRESSURE REQUIREMENTS	P.30

AirBREAK Models

	FC	VC	FQ	VQ1	VQ2
					
Recommended unit	AirBREAK FC	AirBREAK VC	AirBREAK FQ	AirBREAK VQ1	AirBREAK VQ2
Flow range (l/s)	0.2 - 1.8	0.2 - 1.8	0 - 2.2	0 - 2.2	0 - 4
Dry run protection	Yes	Yes	Yes	Yes	Yes
Pressure range (bar)	1 - 8	1 - 8	1 - 10	1 - 16	1 - 16
Nominal tank capacity (L)	36	36	90	90	120
Supply voltage	1ph	1ph	1ph or 3ph	1ph or 3ph	1ph or 3ph
Control type	Fixed speed	Variable speed	Fixed speed	Variable speed	Variable speed
Overall dimensions (W x D x H mm)	650 x 389 x 798	650 x 389 x 798	450 x 520 x 1025	450 x 520 x 1025	600 x 542 x 1316
Insulated tank	Optional	Optional	Optional	Optional	Optional
Wall mountable	Optional	Optional	No	No	No
Auto vessel purge	No	No	Yes	Yes	Yes
Anti-seize	Yes	Yes	Yes	Yes	Yes
Volt-free contact	Yes	Yes	Yes	Yes	Yes
Frost protection kit available	Yes	Yes	Yes	Yes	Yes

MODEL NUMBER CONVENTION

E.g.: VQ1-03-005M-HVS	VQ	1	03	005	M
Product line: VQ = Variable speed high-performance set FQ = Fixed speed high-performance set FC = Fixed speed compact value set					
Number of pumps					
Nominal mid-curve flow per pump (m³/hr)					
kW size (p2) 005 = 0.55 kW 007 = 0.75 kW 011 = 1.1 kW 015 = 1.5 kW 022 = 2.2 kW 030 = 3 kW 040 = 4 kW					
Supply voltage: M = 1 phase 230 V 50 Hz T = 3 phase 400 V 50 Hz					

*Please refer to the sales office for further information on available options.

AirBREAK FC

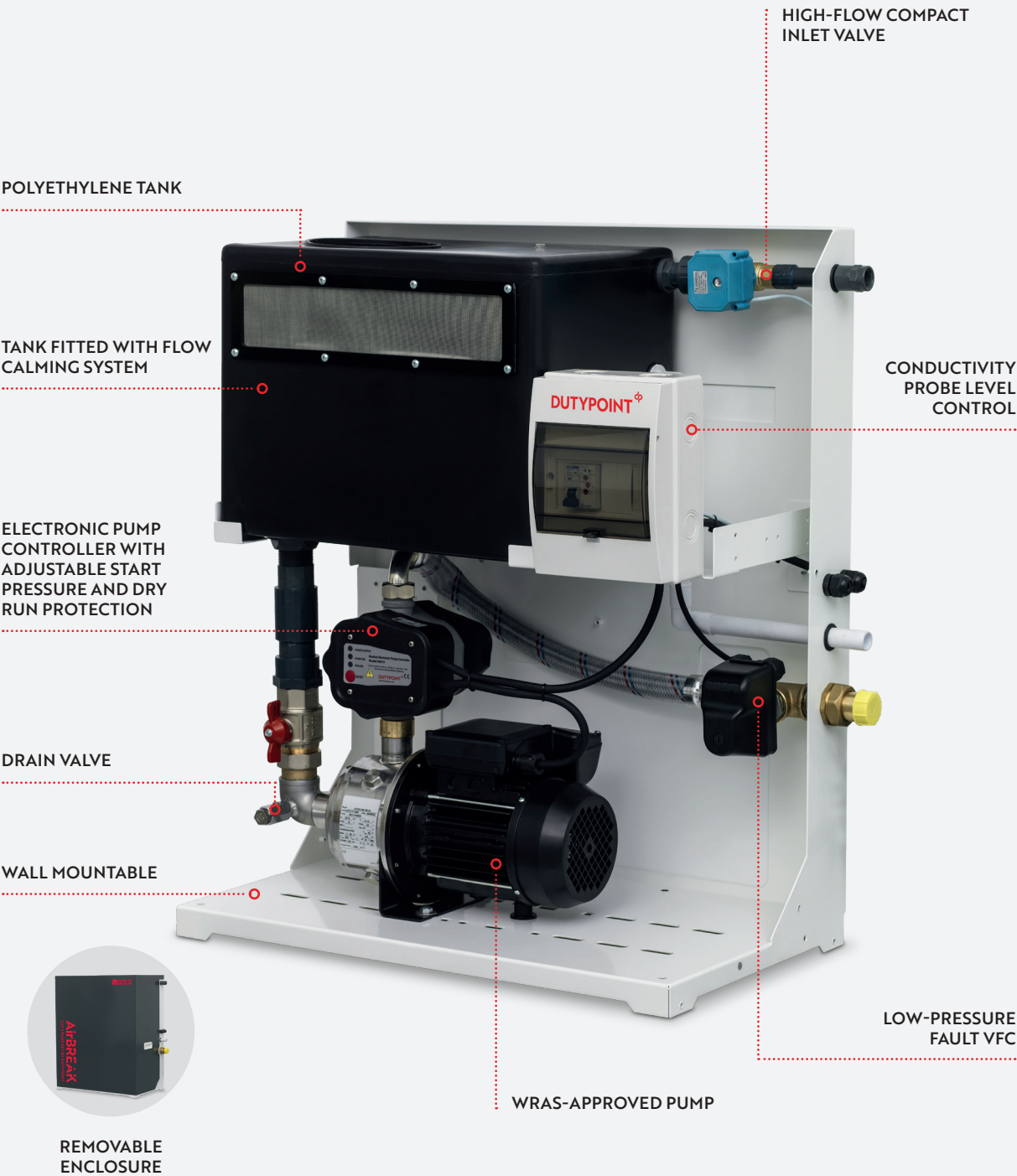
Fixed speed compact value set.

PRODUCT OVERVIEW

- Durable steel enclosure design
- Motorised inlet valve for accurate, high-flow tank fill
- 36-litre nominal tank capacity



Key Features



Specification

The WRAS-approved AirBREAK FC is a compact combined single pump break tank and end-suction booster pump designed for Category 5 backflow protection applications.

The set can be free-standing or wall mounted and is a quiet running system with an integrated electronic pressure controller, all housed within a robust powder-coated mild steel enclosure.

PRODUCT OVERVIEW

- Durable steel enclosure design
- Motorised inlet valve for accurate, high-flow tank fill
- 36-litre nominal tank capacity
- Electronic controller
- Common fault volt-free contact
- Anti-seize technology

OPTIONS

- Weatherproof version with insulated enclosure, frost stat and heater
- High-level alarm VFC
- Weir overflow catch tray with a piped outlet to waste
- Drip tray
- Wall mounting bracket

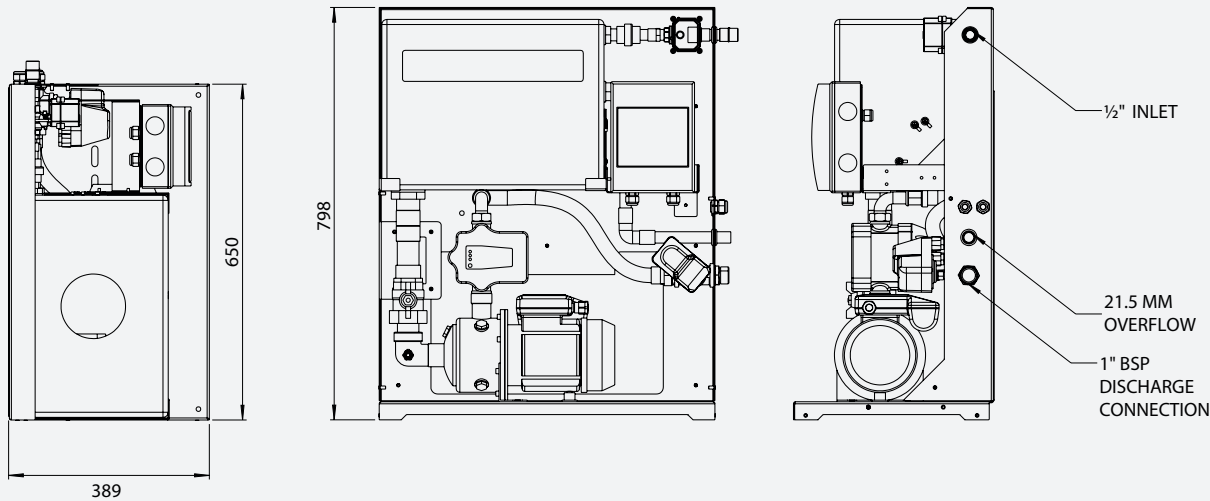
RANGE PERFORMANCE

Flow range	0.2 - 1.8 l/s
Pressure range	1 - 8 bar
Pressure control type	Fixed speed
Maximum system pressure	10 bar
Tank capacity (nominal)	36 litres
Power supply	230 V 1ph 50 Hz
IP rating	IP44
Inlet connection	½" BSP
Outlet connection	1" BSP
Air gap category	Category 5 (AB)
Overflow connection	25 mm
Tank construction	Polyethylene

FC03/05

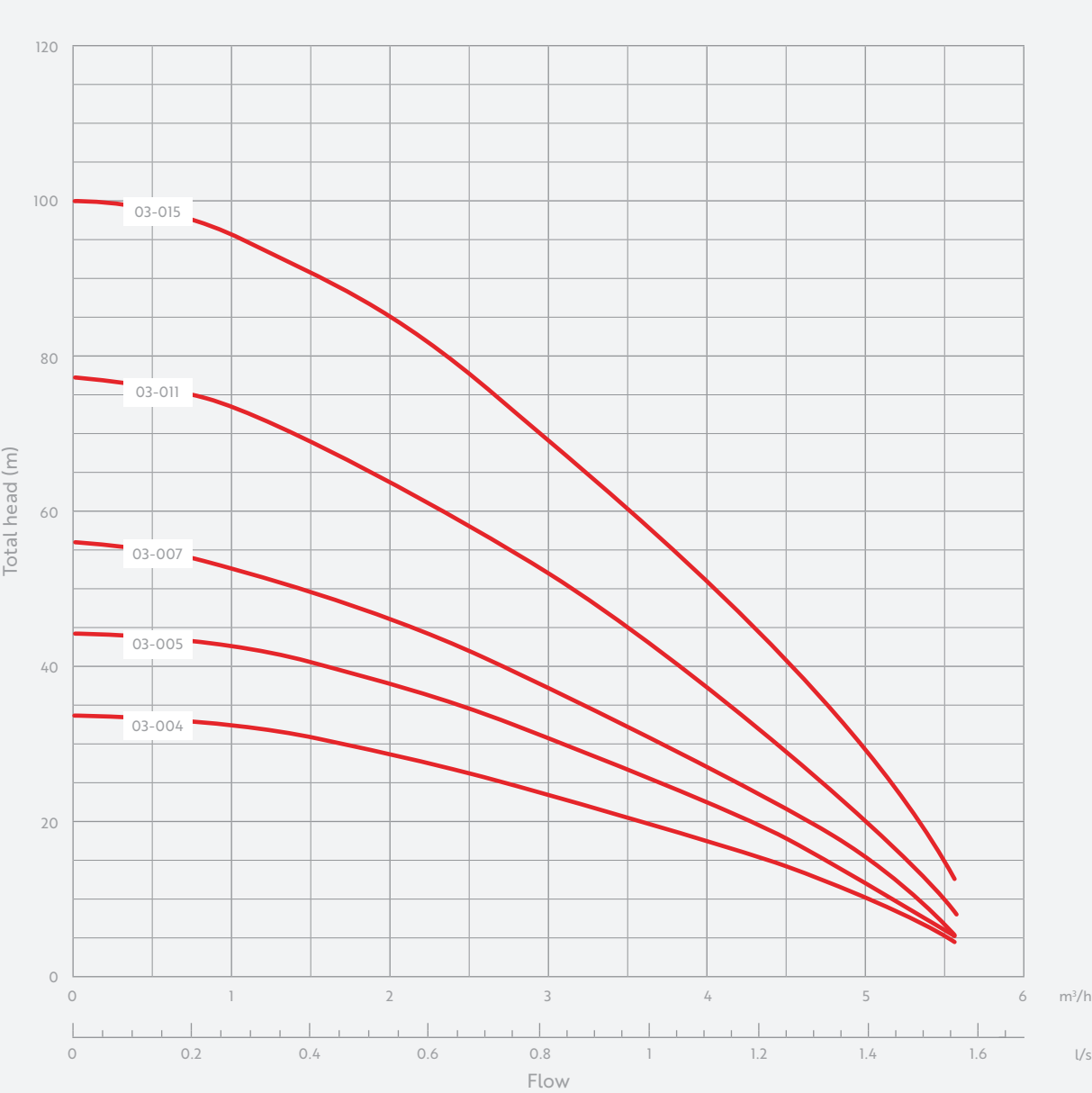
DRAWINGS AND DIMENSIONS

Model no.	Motor power p2 (kW)	Supply voltage	FLC (A)	Total weight (kg)
FC1-03-004M	0.45	230/1/50	3	44
FC1-03-005M	0.55	230/1/50	3.7	44
FC1-03-007M	0.75	230/1/50	4.3	45
FC1-03-011M	1.1	230/1/50	6	48
FC1-03-015M	1.5	230/1/50	7.5	52
FC1-05-005M	0.55	230/1/50	3.9	44
FC1-05-007M	0.75	230/1/50	5.3	46
FC1-05-011M	1.1	230/1/50	6.2	47
FC1-05-015M	1.5	230/1/50	8.2	51



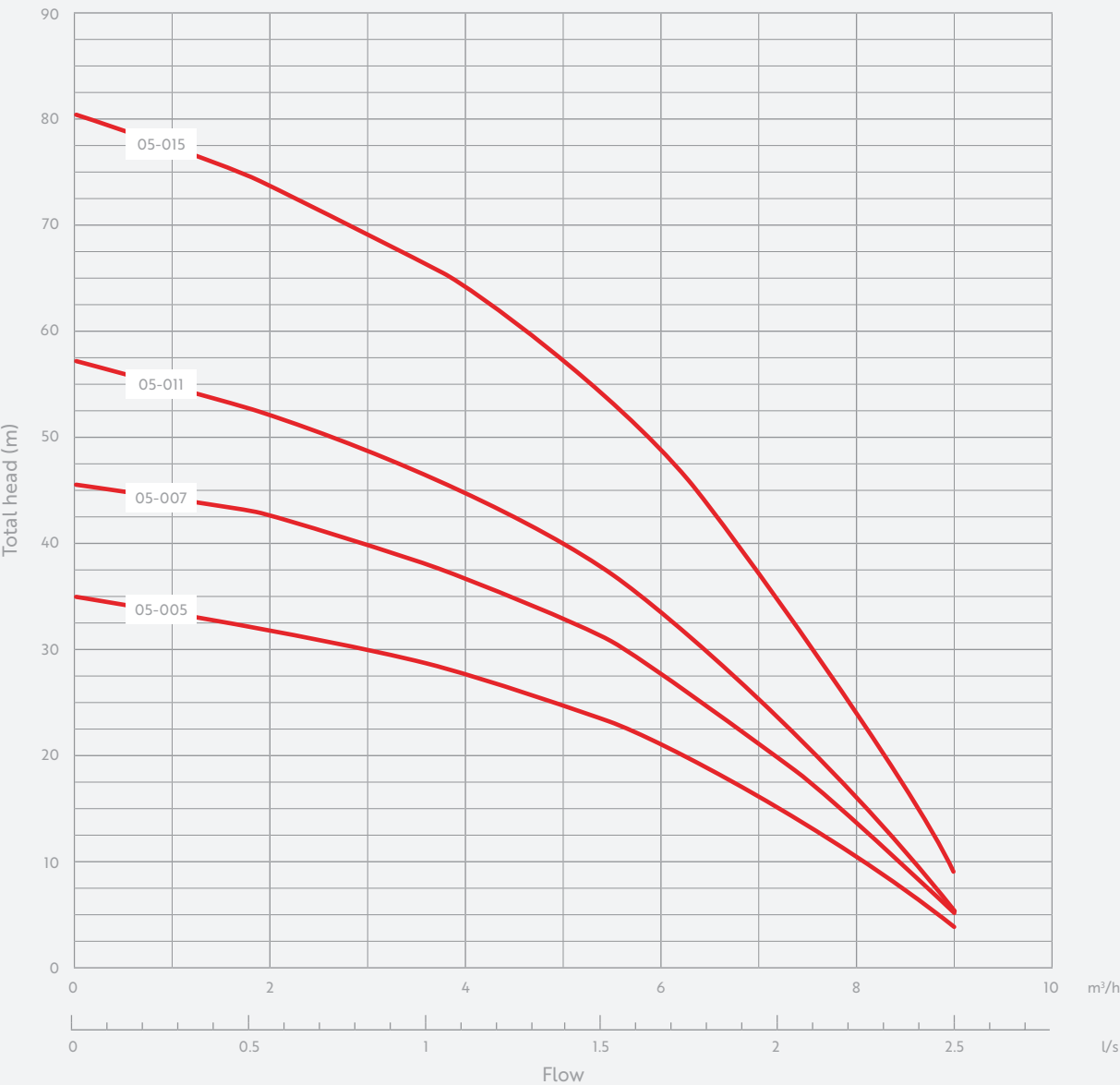
FC03 Series

SINGLE PUMP CURVES



FC05 Series

SINGLE PUMP CURVES



AirBREAK VC

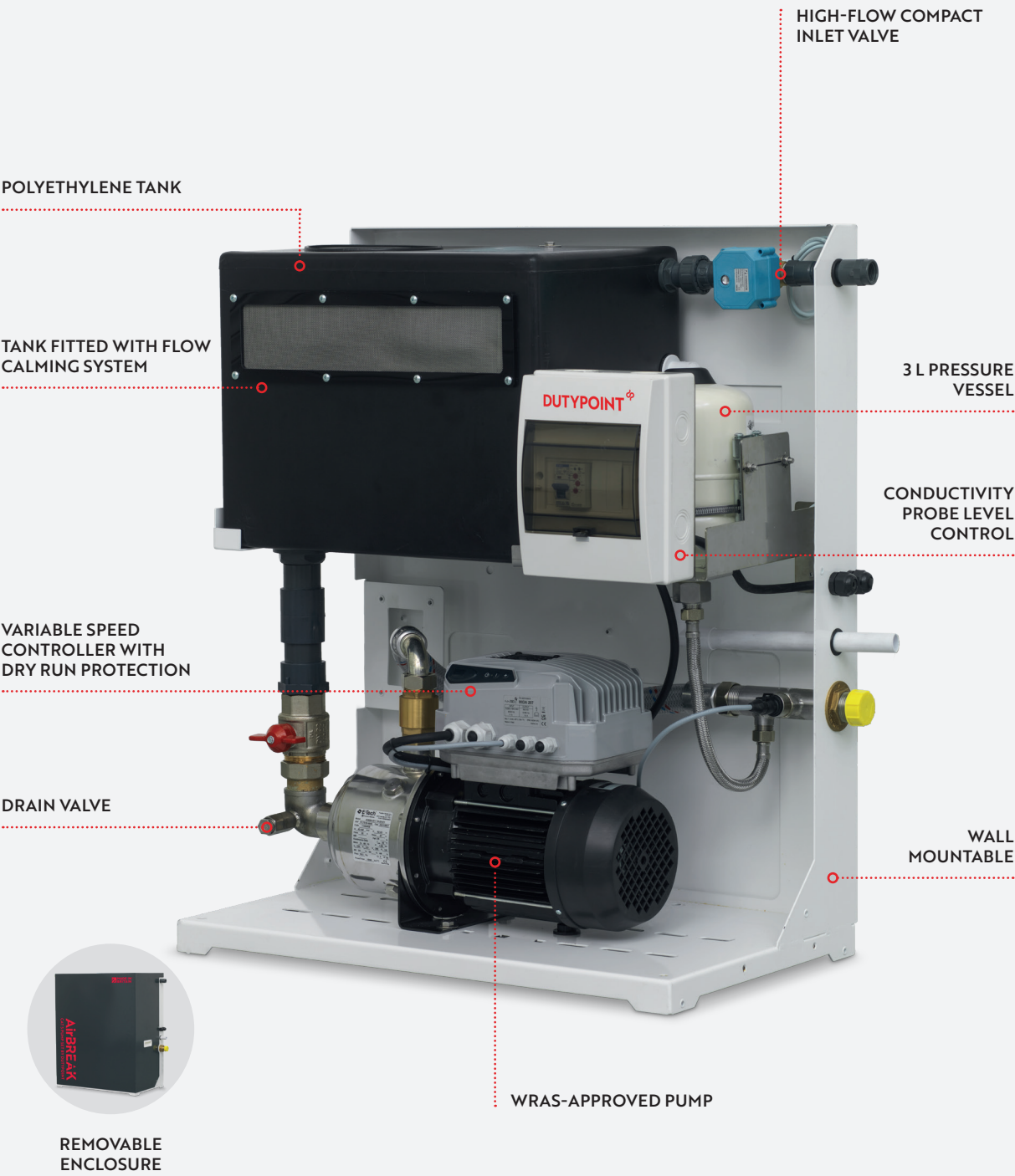
Variable speed compact value set.

PRODUCT OVERVIEW

- Variable speed controller
- Durable steel enclosure design
- Volt-free contacts for common faults and pump running



Key Features



Specification

The AirBREAK VC is a variable-speed compact combined single pump break tank and end-suction booster pump designed for Category 5 backflow protection applications.

The set can be free-standing or wall-mounted and is a quiet running system with an integrated variable speed drive and a 3 L pressure vessel. The whole unit is housed within a robust powder-coated mild steel enclosure.

PRODUCT OVERVIEW

- Variable speed controller
- Durable steel enclosure design
- Motorised inlet valve for accurate, high-flow tank fill
- 36-litre nominal tank capacity
- Volt-free contacts for common faults and pump running
- Anti-seize technology

OPTIONS

- Weatherproof version with insulated enclosure, frost stat and heater
- High-level alarm VFC
- Weir overflow catch tray with a piped outlet to waste
- Drip tray
- Wall mounting bracket

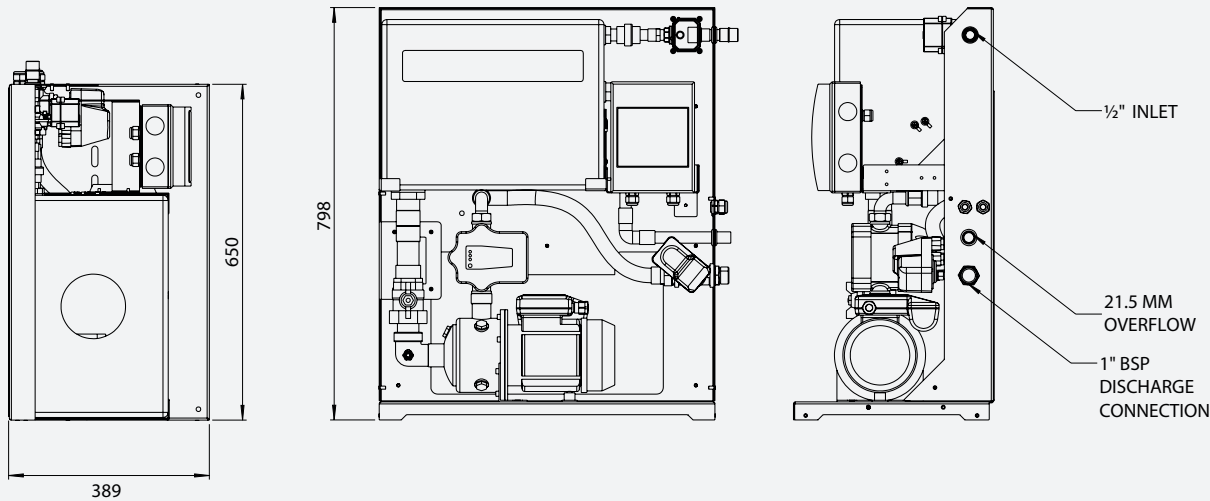
RANGE PERFORMANCE

Flow range	0.2 - 1.8 l/s
Pressure range	1 - 8 bar
Pressure control type	Variable speed
Maximum system pressure	10 bar
Tank capacity (nominal)	36 litres
Power supply	230 V 1ph 50 Hz
IP rating	IP44
Inlet connection	½" BSP
Outlet connection	1" BSP
Air gap category	Category 5 (AB)
Overflow connection	25 mm
Tank construction	Polyethylene

VC03/05

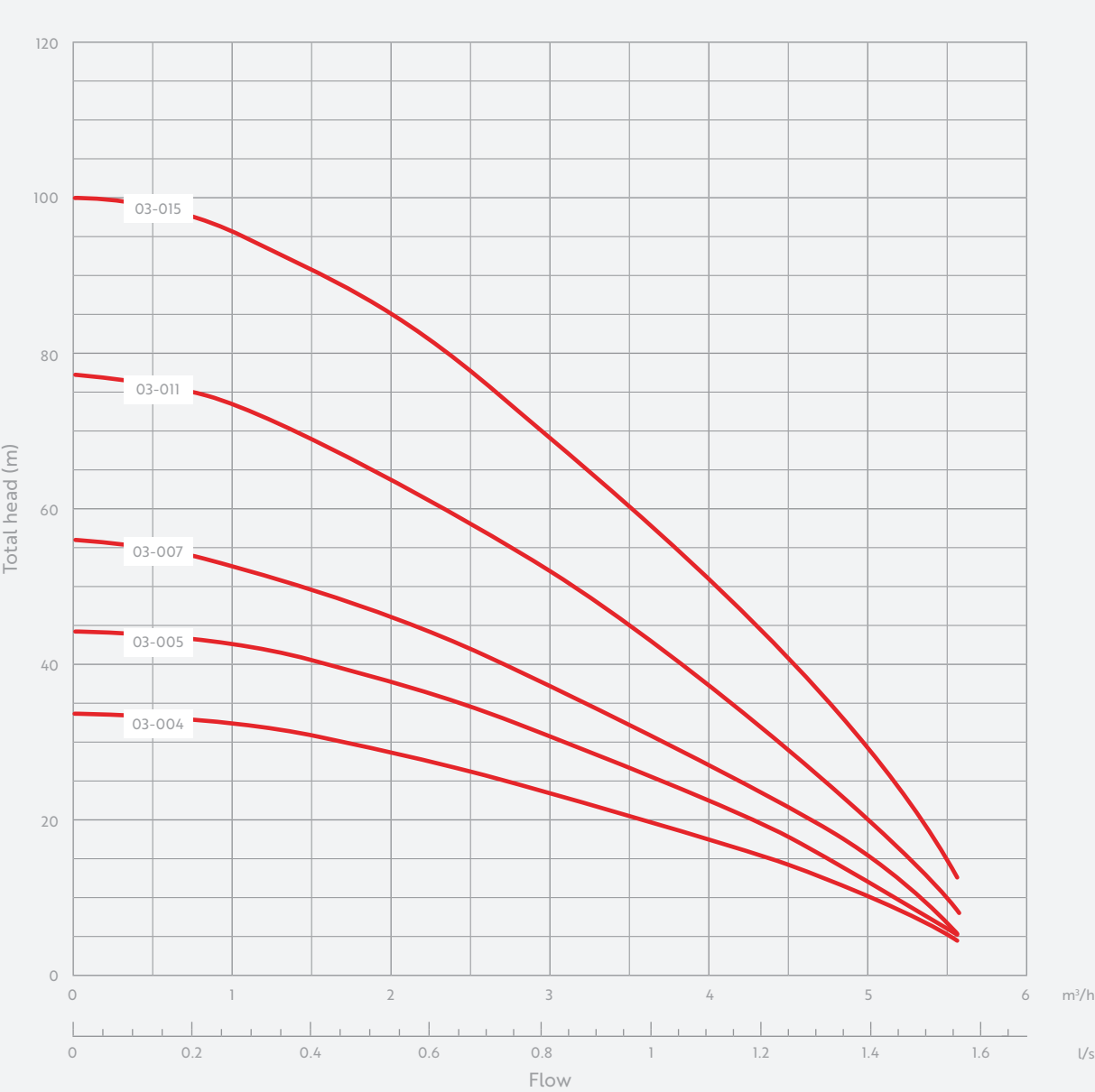
DRAWINGS AND DIMENSIONS

Model no.	Motor power p2 (kW)	Supply voltage	FLC (A)	Total weight (kg)
VC1-03-004M	0.45	230/1/50	2.1	46
VC1-03-005M	0.55	230/1/50	2.4	46
VC1-03-007M	0.75	230/1/50	2.7	47
VC1-03-011M	1.1	230/1/50	3.6	50
VC1-03-015M	1.5	230/1/50	5.1	54
VC1-05-005M	0.55	230/1/50	2.5	46
VC1-05-007M	0.75	230/1/50	3.2	48
VC1-05-011M	1.1	230/1/50	3.7	49
VC1-05-015M	1.5	230/1/50	5.5	53



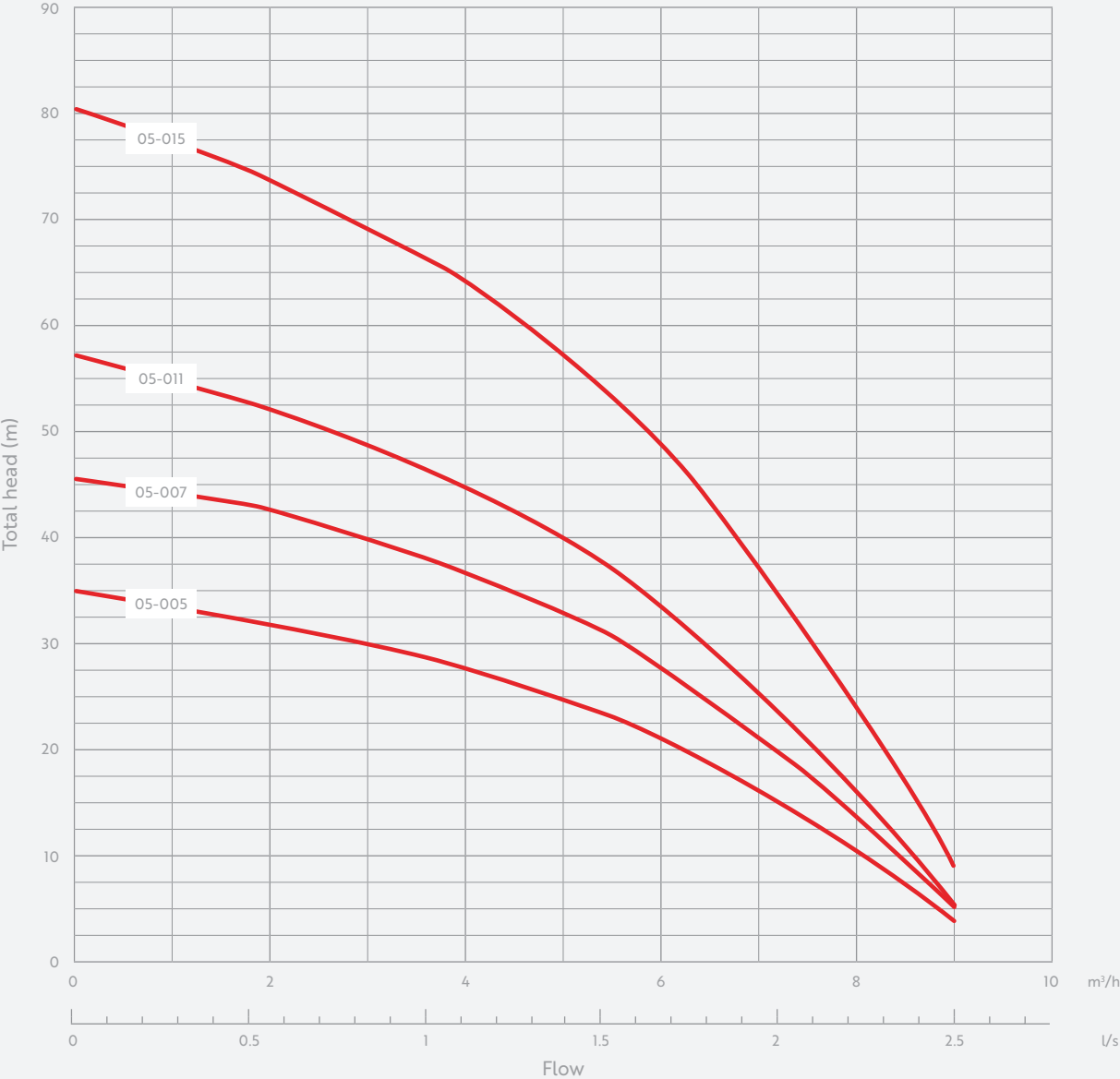
VC03 Series

SINGLE PUMP CURVES



VC05 Series

SINGLE PUMP CURVES



AirBREAK FQ

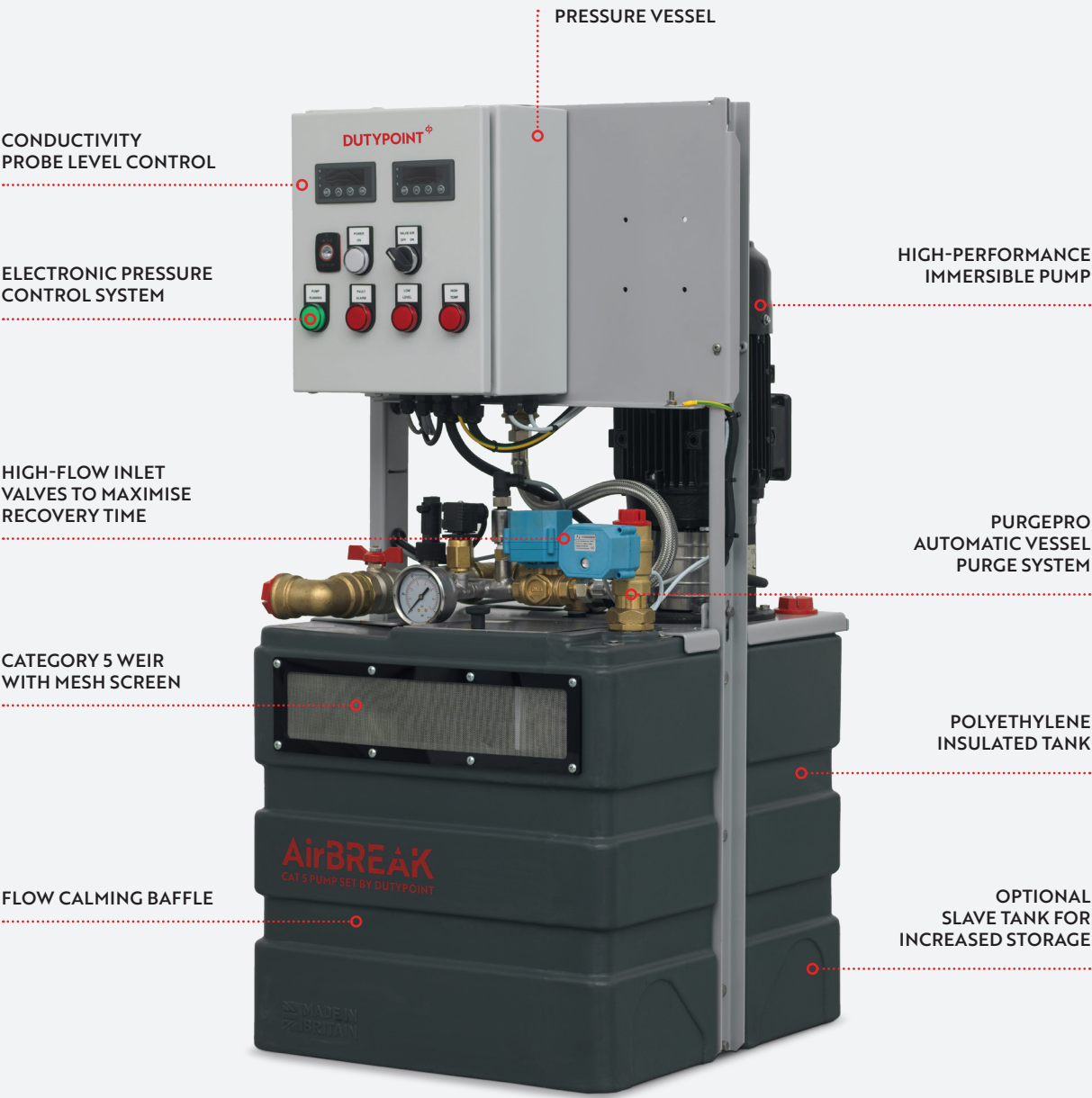
Fixed speed
high-performance set.

PRODUCT OVERVIEW

- Motorised 1" inlet valve for ultra-high top-up flow rate
- PurgePRO automatic pressure vessel purge function
- Anti-seize technology



Key Features



Specification

The WRAS-approved AirBREAK FQ is a space-saving, fixed speed single pump combined break tank and booster pump designed for Category 5 backflow protection applications. With its unique immersible type pump design, the FQ delivers unrivalled performance for its footprint.

The premium control system incorporates intelligent pump control utilising both pressure transducer and flow sensors to maximise efficiency and reduce the frequency of pump cycling for lower flow scenarios.

PurgePRO automatic pressure vessel purge function and anti-seize are included as standard.

PRODUCT OVERVIEW

- Industry-leading performance for its footprint
- Motorised 1" inlet valve for ultra-high top-up flow rate
- Integrated flow calming system to reduce turbulence
- Electronic pressure control
- 8-litre pressure vessel
- Common fault volt-free contact
- PurgePRO automatic pressure vessel purge function
- Anti-seize technology
- Insulated tank

OPTIONS

- High-level alarm VFC
- High-temperature alarm VFC
- High-temperature alarm with an automatic purge
- Weir overflow catch tray with a piped outlet to waste
- Tank drain valve
- Slave tank to double capacity
- Weatherproof kiosk with frost stat, heater and consumer in
- Drip tray c/w level sensor linked to inlet cut-off

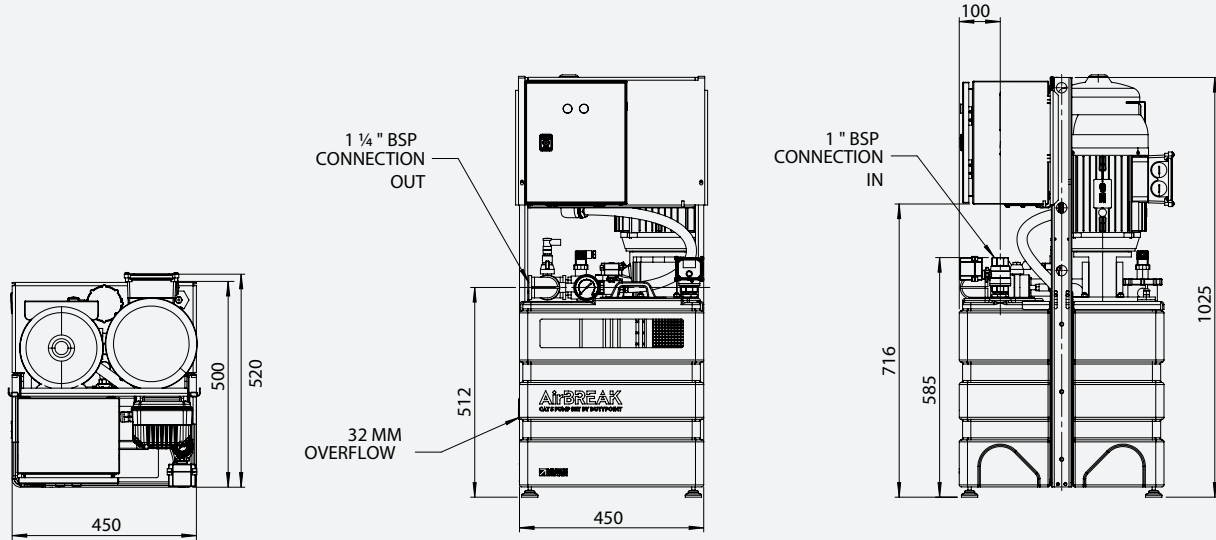
RANGE PERFORMANCE

Flow range	0 - 2.2 l/s
Pressure range	1 - 10 bar
Pressure control type	Fixed speed
Maximum system pressure	10 bar
Tank capacity (nominal)	90 litres
Power supply	230 V 1ph 50 Hz or 400 V 3ph 50 Hz
IP rating	IP44
Inlet connection	1" BSP
Outlet connection	1 1/4" BSP
Air gap category	Category 5 (AB)
Overflow connection	40 mm
Tank construction	Polyethylene

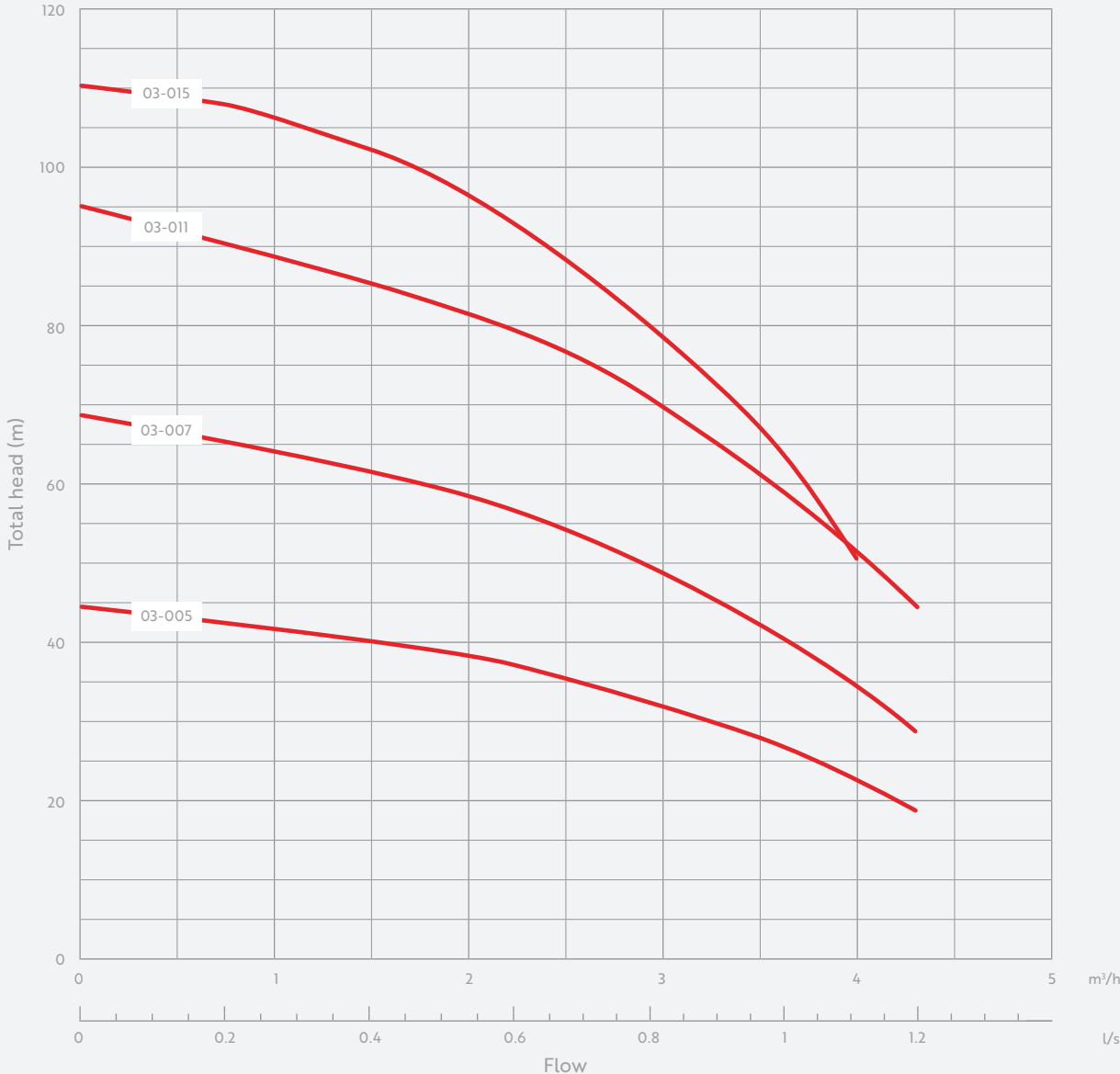


DRAWINGS AND DIMENSIONS

Model no.	Motor power p2 (kW)	Supply voltage	FLC (A)	Total weight (kg)
FQ1-03-005M	0.55	230/1/50	3.6	54
FQ1-03-005T	0.55	400/3/50	1.5	54
FQ1-03-007M	0.75	230/1/50	4.5	55
FQ1-03-007T	0.75	400/3/50	2	55
FQ1-03-011M	1.1	230/1/50	5	62
FQ1-03-011T	1.1	400/3/50	2.3	62
FQ1-03-015T	1.5	400/3/50	3.1	68
FQ1-05-005M	0.55	230/1/50	3.6	53
FQ1-05-005T	0.55	400/3/50	1.5	53
FQ1-05-007M	0.75	230/1/50	4.5	55
FQ1-05-007T	0.75	400/3/50	2	55
FQ1-05-011M	1.1	230/1/50	5	62
FQ1-05-011T	1.1	400/3/50	2.3	62
FQ1-05-015M	1.5	230/1/50	8.5	67
FQ1-05-015T	1.5	400/3/50	3.4	67
FQ1-05-022T	2.2	400/3/50	4.4	72

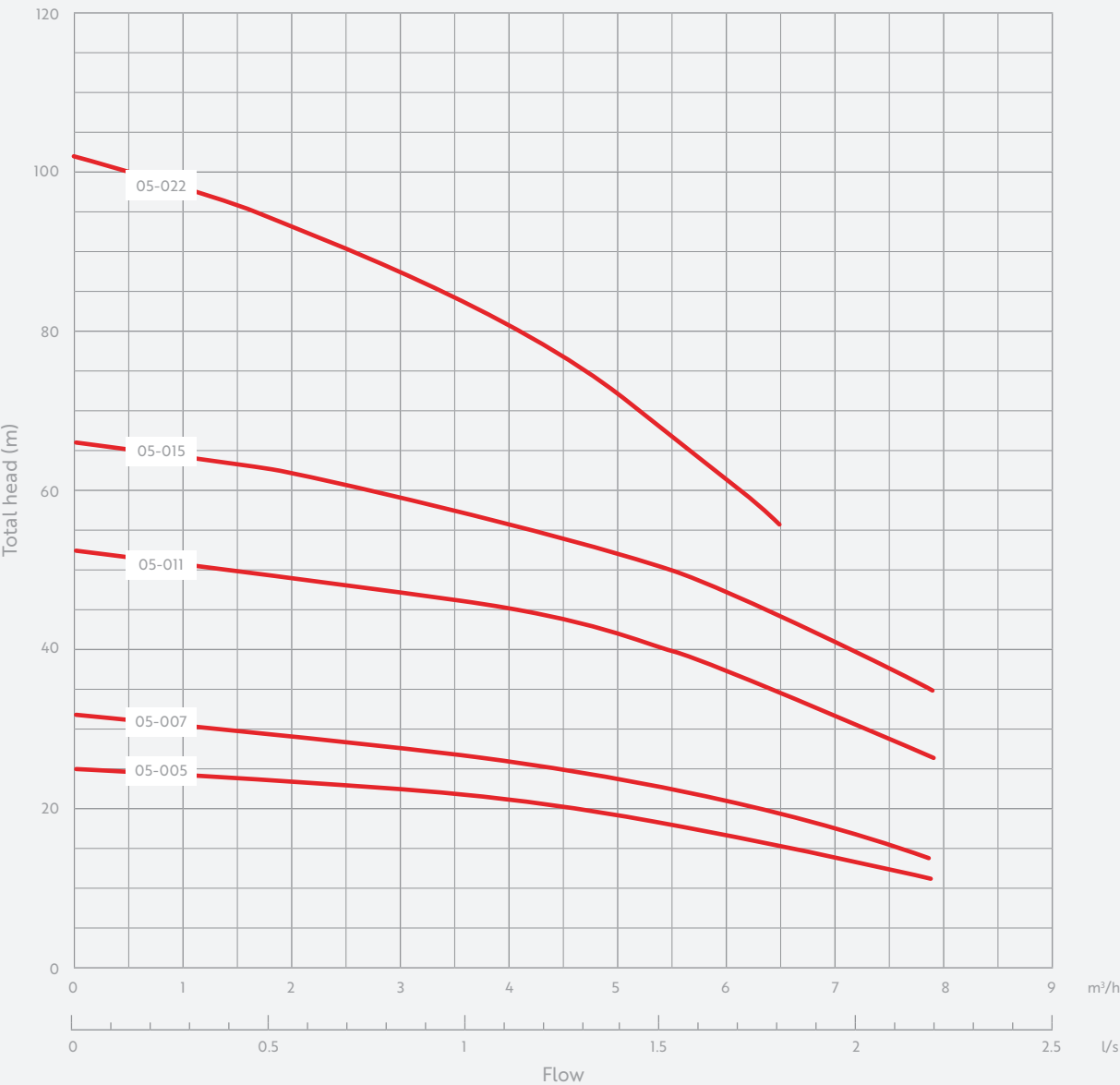


SINGLE PUMP CURVES



FQ05 Series

SINGLE PUMP CURVES



AirBREAK VQ

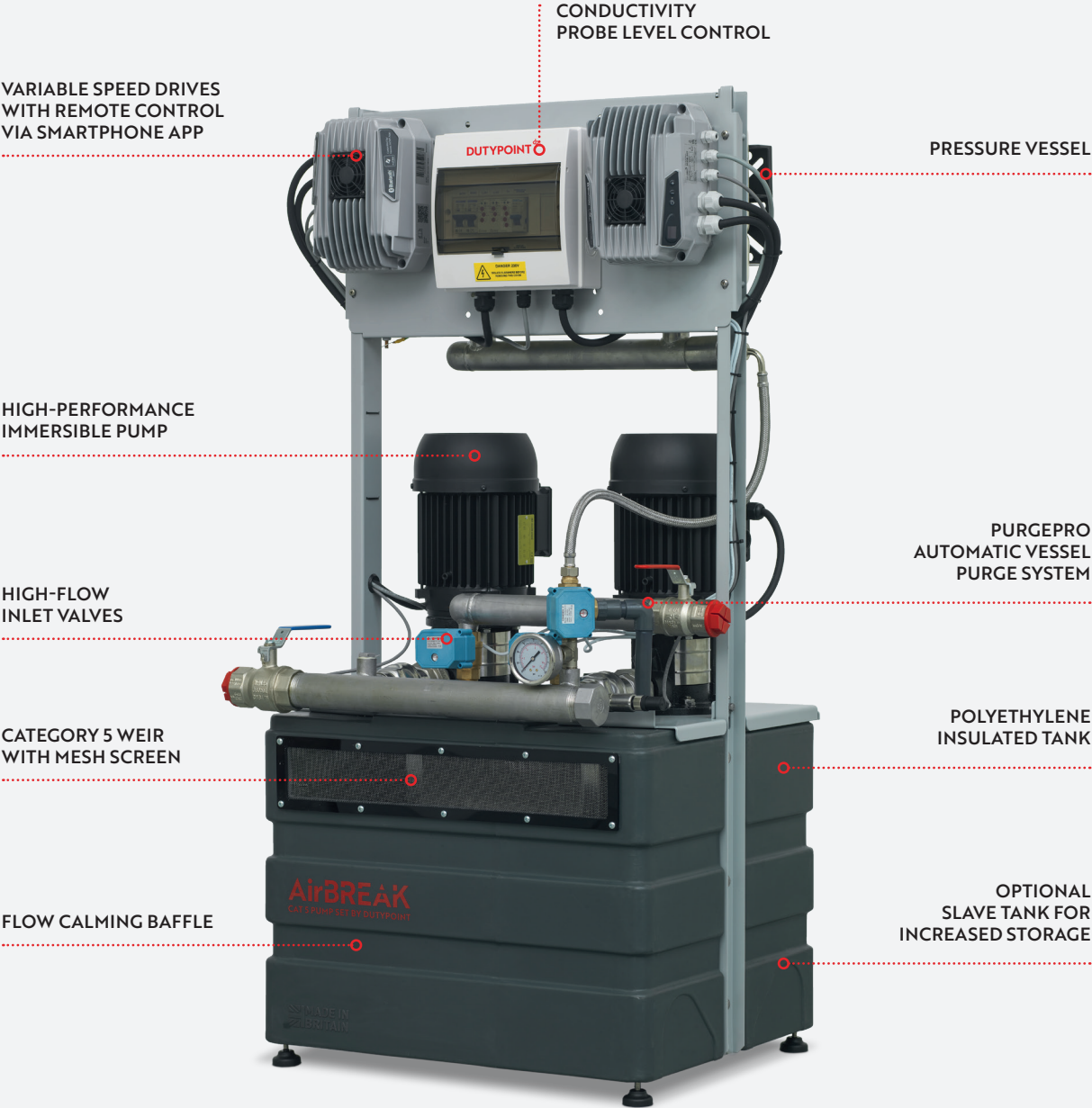
Variable speed high-performance set.

PRODUCT OVERVIEW

- Dual full-bore motorised inlet valves for reliable ultra-high top-up flow rate
- PurgePRO automatic pressure vessel purge function
- High-efficiency variable speed control



Key Features



Specification

The WRAS-approved AirBREAK VQ is a space-saving, high-performance variable speed single pump combined break tank and booster pump designed for Category 5 backflow protection applications, available as single or twin pump configurations. With its unique immersible type pump design, the VQ delivers unrivalled performance for its footprint.

The premium variable speed control system incorporates intelligent pump control to maximise efficiency across a wide range of duty requirements.

PurgePRO automatic pressure vessel purge function and anti-seize are included as standard.

PRODUCT OVERVIEW

- Industry-leading performance for its footprint
- Single or twin pump options
- Dual full-bore motorised inlet valves for reliable ultra-high top-up flow rate
- Integrated flow calming system to reduce turbulence
- 90-litre (single pump) or 120-litre (twin pump) nominal tank capacity
- 1no or 2no 8-litre pressure vessels
- Common fault volt-free contact
- PurgePRO automatic pressure vessel purge function
- Anti-seize technology
- Advanced EMC compatibility and power factor correction (PFC)
- Smartphone app control
- Insulated tank

RANGE PERFORMANCE

Flow range	0 - 4 l/s
Pressure range	1 - 16 bar
Pressure control type	Variable speed
Maximum system pressure	10 bar/16 bar
Tank capacity (nominal)	90 - 120 litres
Power supply	230 V 1ph 50 Hz or 400 V 3ph 50 Hz
IP rating	IP44
Inlet connection	1 ½" BSP
Outlet connection	1 ½" BSP
Air gap category	Category 5 (AB)
Overflow connection	40 mm
Tank construction	Polyethylene

OPTIONS

- High-level alarm VFC
- High-temperature alarm VFC
- High-temperature alarm with an automatic purge
- Weir overflow catch tray with a piped outlet to waste
- Tank drain valve
- Slave tank to double capacity
- Weatherproof kiosk with frost stat, heater and consumer in
- Drip tray c/w level sensor linked to inlet cut-off

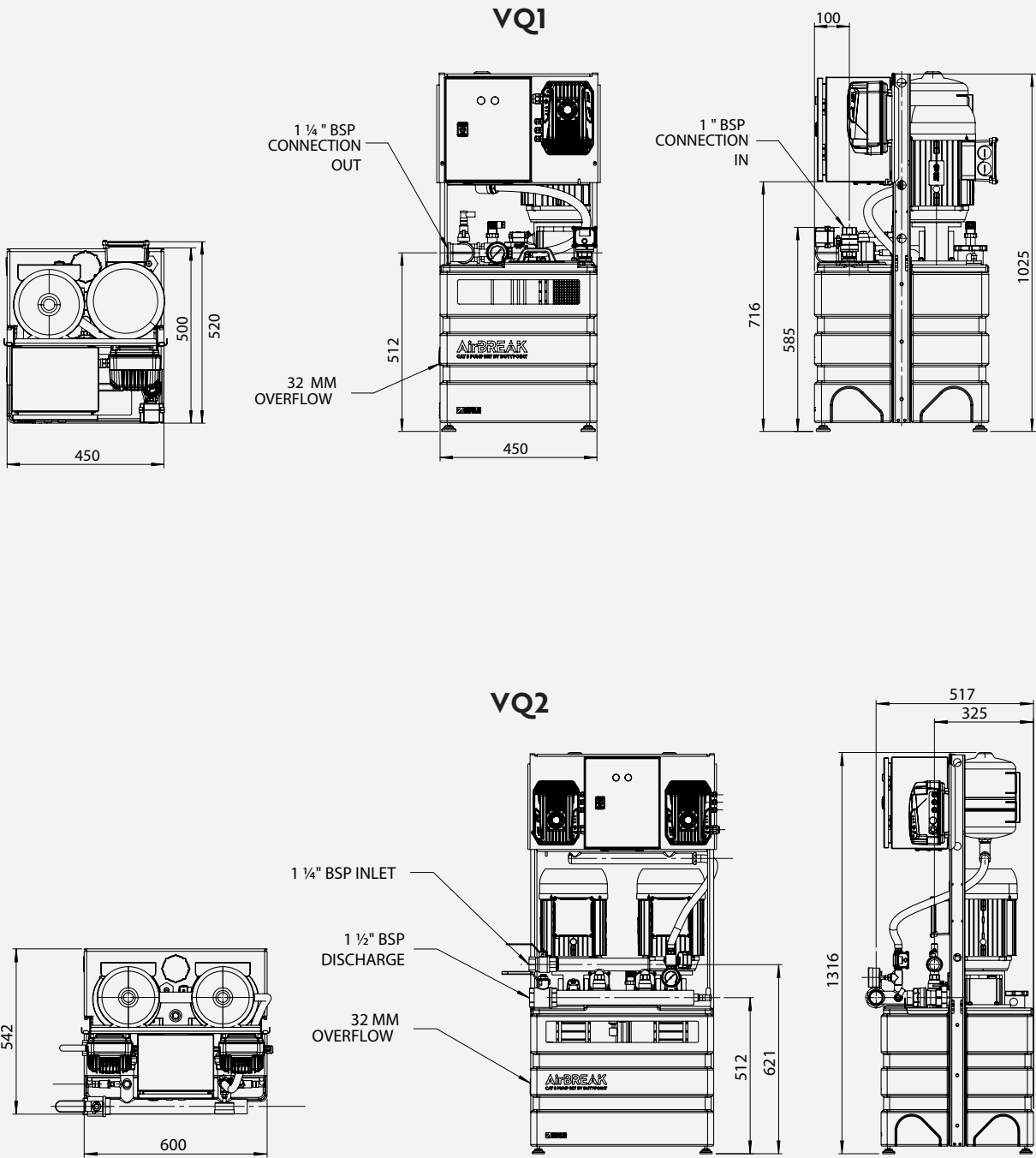


VQ03/05

DRAWINGS AND DIMENSIONS

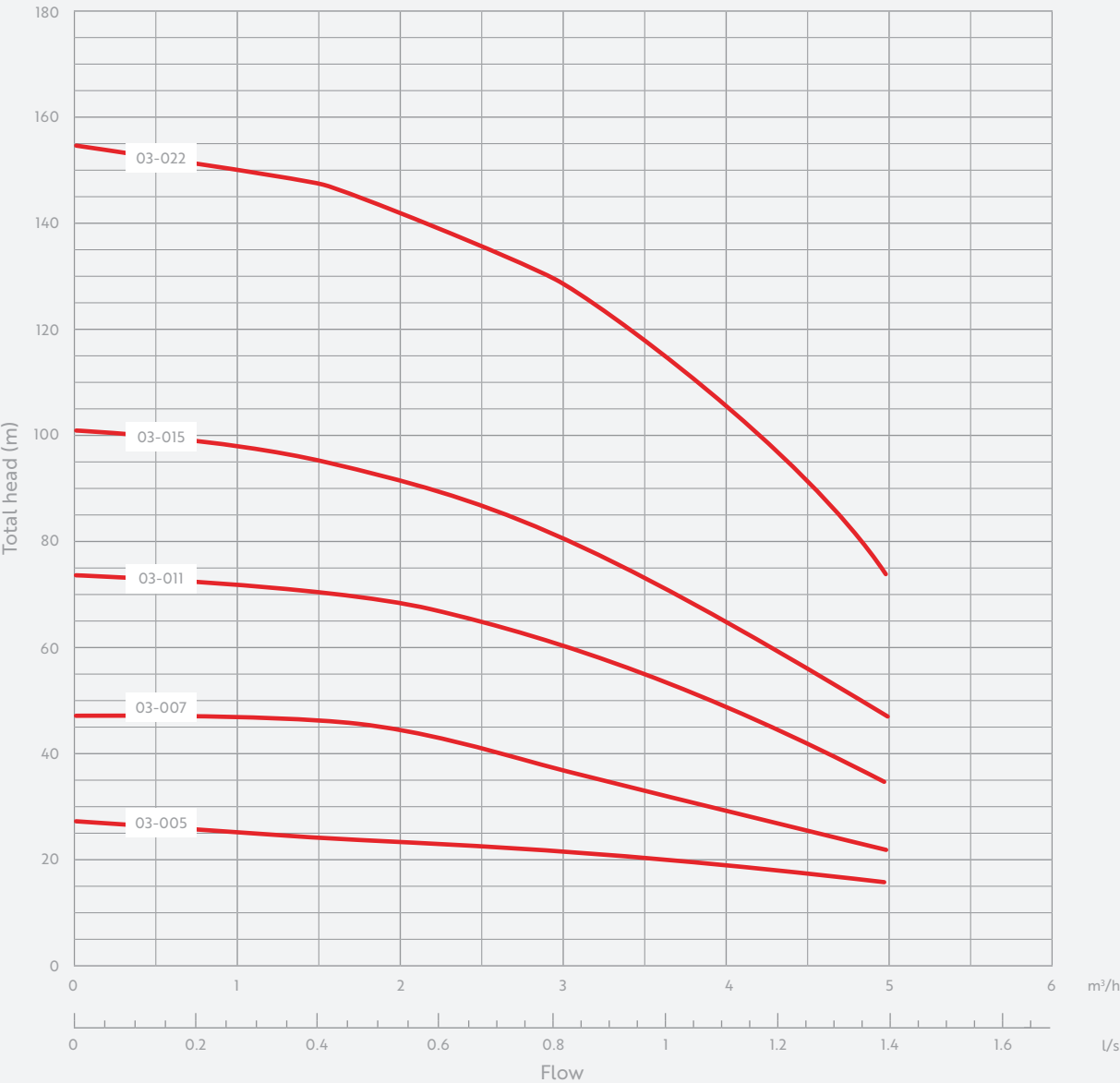
Model no.	No. of pumps	Motor power p2 (kW)	Supply voltage	FLC (A, per pump)	Tank nominal capacity (L)	Total weight (kg)
VQ1-03-005M	1	0.55	230/1/50	2.3	90	57
VQ1-03-005T	1	0.55	400/3/50	1.4	90	57
VQ1-03-007M	1	0.75	230/1/50	2.9	90	62
VQ1-03-007T	1	0.75	400/3/50	1.7	90	62
VQ1-03-011M	1	1.1	230/1/50	4.1	90	65
VQ1-03-011T	1	1.1	400/3/50	2.4	90	65
VQ1-03-015M	1	1.5	230/1/50	5.4	90	70
VQ1-03-015T	1	1.5	400/3/50	3.1	90	70
VQ1-03-022T	1	2.2	400/3/50	4.4	90	72
VQ1-05-011M	1	1.1	230/1/50	4.1	90	60
VQ1-05-011T	1	1.1	400/3/50	2.4	90	60
VQ1-05-015M	1	1.5	230/1/50	5.4	90	65
VQ1-05-015T	1	1.5	400/3/50	3.1	90	65
VQ1-05-022T	1	2.2	400/3/50	4.4	90	70
VQ1-05-030T	1	3	400/3/50	5.6	90	74
VQ1-05-040T	1	4	400/3/50	7.4	90	78
VQ2-03-005M	2	0.55	230/1/50	2.3	120	89
VQ2-03-005T	2	0.55	400/3/50	1.4	120	89
VQ2-03-007M	2	0.75	230/1/50	2.9	120	99
VQ2-03-007T	2	0.75	400/3/50	1.7	120	99
VQ2-03-011M	2	1.1	230/1/50	4.1	120	105
VQ2-03-011T	2	1.1	400/3/50	2.4	120	105
VQ2-03-015M	2	1.5	230/1/50	5.4	120	115
VQ2-03-015T	2	1.5	400/3/50	3.1	120	115
VQ2-03-022T	2	2.2	400/3/50	4.4	120	119
VQ2-05-011M	2	1.1	230/1/50	4.1	120	95
VQ2-05-011T	2	1.1	400/3/50	2.4	120	95
VQ2-05-015M	2	1.5	230/1/50	5.4	120	105
VQ2-05-015T	2	1.5	400/3/50	3.1	120	105
VQ2-05-022T	2	2.2	400/3/50	4.4	120	115
VQ2-05-030T	2	3	400/3/50	5.6	120	123
VQ2-05-040T	2	4	400/3/50	7.4	120	131

VQ1/VQ2



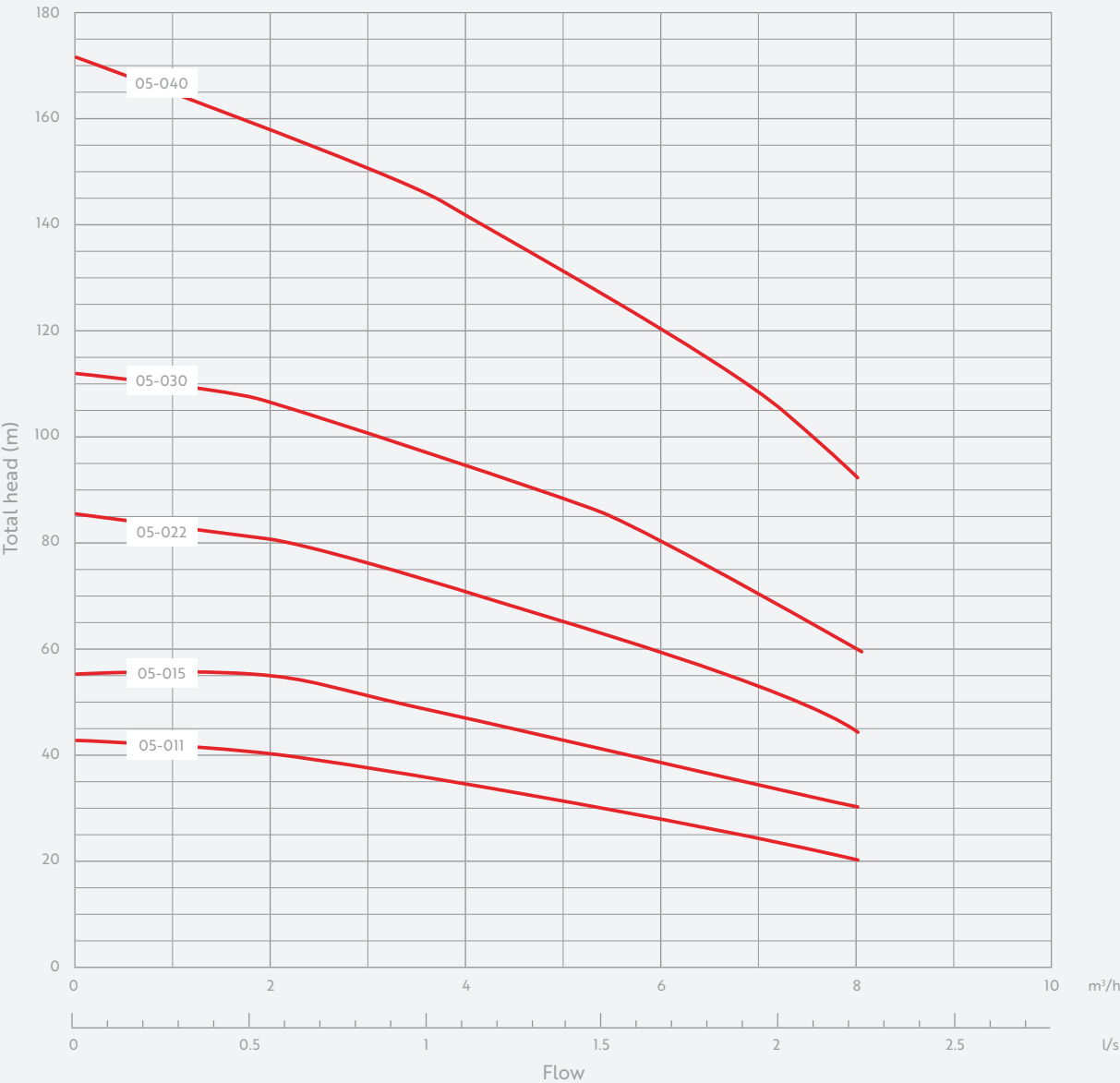
VQ03 Series

SINGLE PUMP CURVES



VQ05 Series

SINGLE PUMP CURVES



AirBREAK Inlet Pressure Requirements

The AirBREAK range of Category 5 pump sets are designed to achieve a high-duty performance with a small footprint, and therefore, the tank is designed as a break tank only to achieve the Category 5 air gap rather than providing any buffer storage volume.

This means the system requires a sufficient inflow rate to match the required discharge flow rate.

The AirBREAK tank inlet control systems are designed to maximise the inflow rate, even at low dynamic inlet pressures, to ensure you get the most out of the system and achieve optimum overall system efficiency.

The tables provide a guide for the required dynamic inlet pressure to achieve specific duty flow rates.

FC & VC RANGE

Duty flow rate (l/s)	Required dynamic inlet pressure (bar)
0.5	0.3
0.75	0.5
1	0.7
1.25	1
1.5	1.5
1.8	2

VQ1 & FQ1 RANGE

Duty flow rate (l/s)	Required dynamic inlet pressure (bar)
0.5	0.2
0.75	0.2
1	0.2
1.25	0.3
1.5	0.4
1.75	0.5
2	0.6
2.2	0.7

VQ2

Duty flow rate (l/s)	Required dynamic inlet pressure (bar)
1	0.2
1.5	0.3
2	0.3
2.5	0.4
3	0.6
3.5	0.7
4	0.8



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AirBREAK
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Let's talk about AirBREAK

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