



Environmental Technology

Linear Diaphragm Pumps

Membrane Diffusers

Side Channel Blowers

AODD Pumps

BIBUS (UK) Ltd

We are part of the BIBUS Group consisting of 50+ subsidiaries across 29 countries with business segments in technology, materials, electronics, and core competencies in engineering, logistics & service in Pneumatics, Mechatronics, and Environmental Technology.

BIBUS (UK) Ltd is part of the technology group, providing sales, distribution and technical support of SECOH Sangyo linear diaphragm air pump, FPZ side channel blowers, Jager fine bubble membrane diffusers and Yamada AODD pumps used in process and wastewater treatment industries.

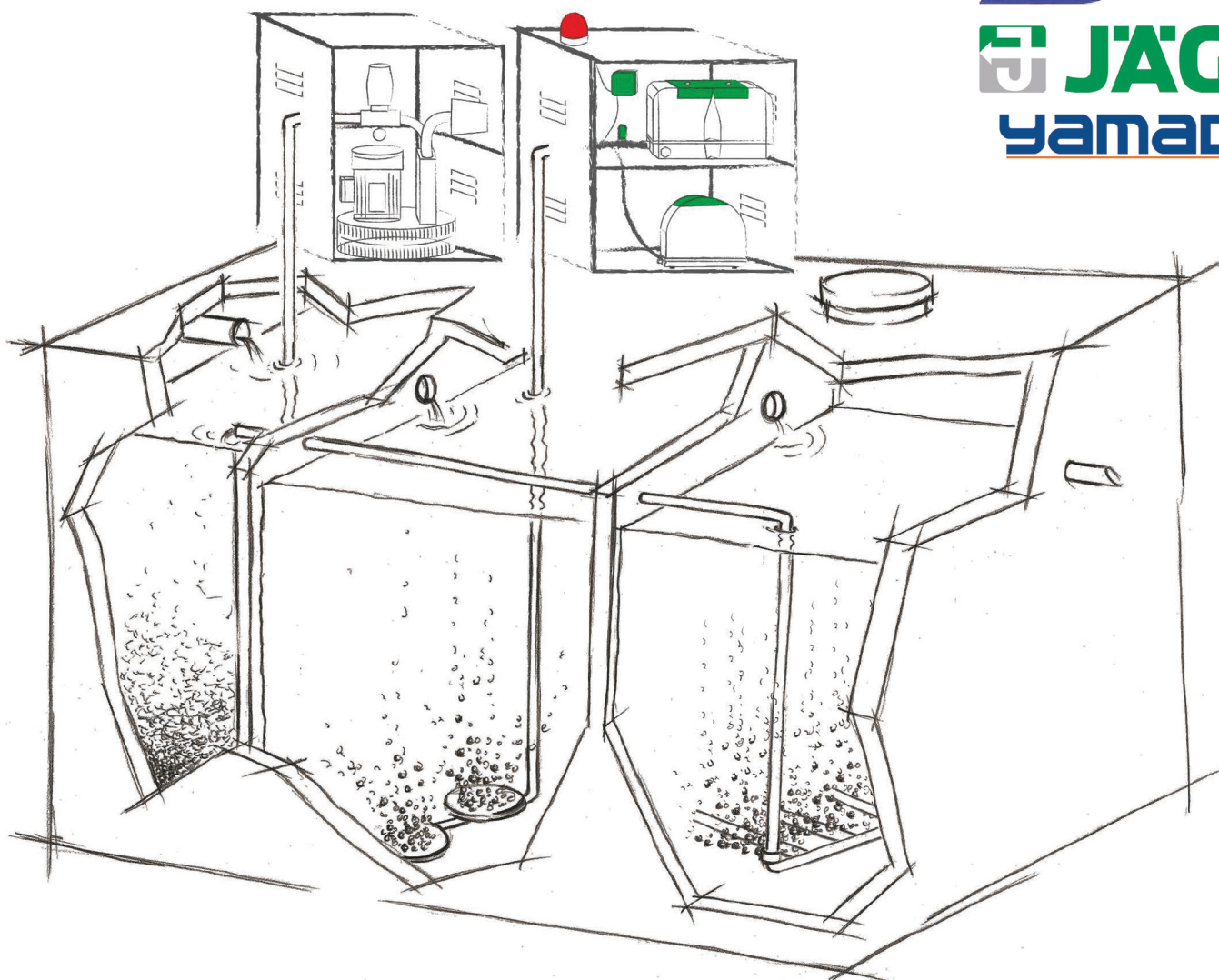
BIBUS (UK) Ltd complies with NQA ISO 9001 standards assuring product & service quality.

Water Treatment and Environmental Technology

Environmental Technology is one of the core competencies of the BIBUS group. Our products are commonly used in the process of aeration found in decentralised wastewater treatment plants. Over 20 years of experience and an international network of supply partners enables us to offer the right solution for your application.



Our Environmental Technologies Suppliers include:

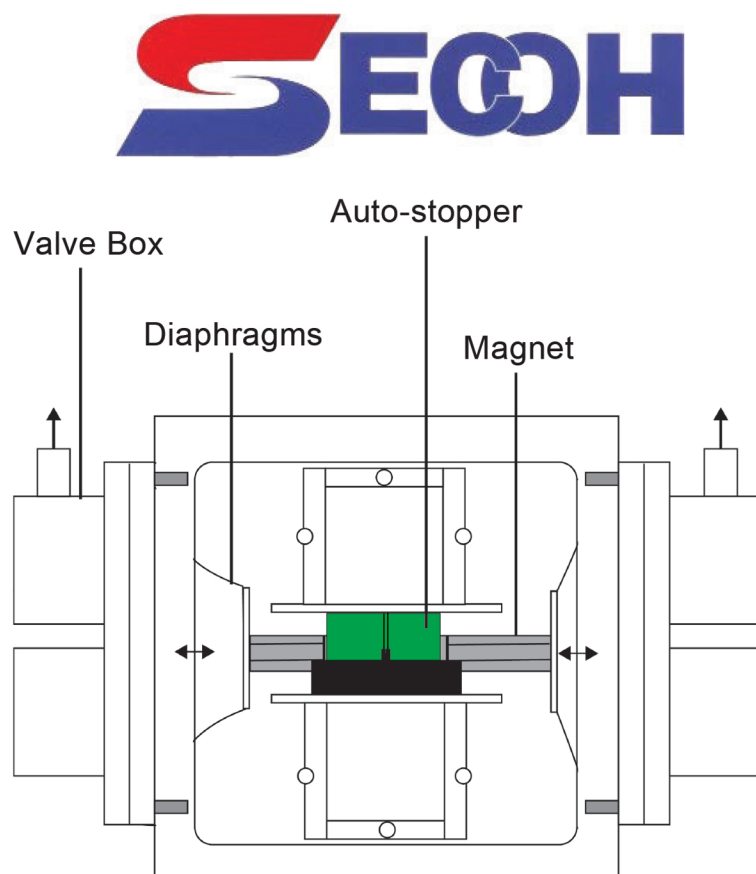


Operating Principle

Linear diaphragm pumps work on the principle of a magnetic shuttle held by the diaphragms of opposed heads. On either side of the shuttle is an electromagnet which is energised by an alternating voltage oscillating at 50 or 60 Hz.

The oscillating motion of the magnet moves a controlled air volume through the valve boxes and pump base labyrinth to finally discharge pulse-free air.

SECOH models JDK-60 to JDK-500 incorporate a re-set auto-stopper device to protect the pump motor drive unit from normal diaphragm wear & tear.



Advantages of Secoh

- Reduced Power Consumption
- Optimum Airflow Performance rated @ 200 mbar for JDK-40 to 120 and up to 300 mbar for JDK-150 to 500
- JDK-150 to 500 models supplied with Pressure Relief Valve set to 250 mbar
- Available with LED Service Light, Signal Cable or Alarm Box
- Compact Design
- Self-Aligning Magnet for Simple Servicing
- Long-Life Expectancy
- Low Noise Level
- Completely Oil-free
- Pulsation-free Airflow
- Annual Service Suggested

Selecting the Blower Size

Different manufacturers' pumps perform differently. Therefore, we recommend comparing performance data to ensure an accurate replacement.

We are happy to advise the correct pump for your application.



BIBUS



JDK Series

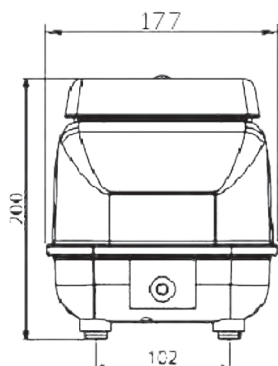
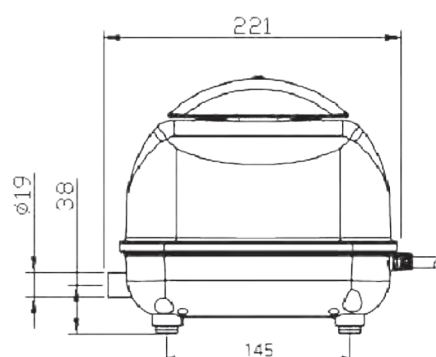
JDK - 40 / JDK - 50

Product Characteristics

- Compact Design
- Low Energy Consumption
- High-Quality Plastic Housing
- Connecting Hose Included



Dimensions



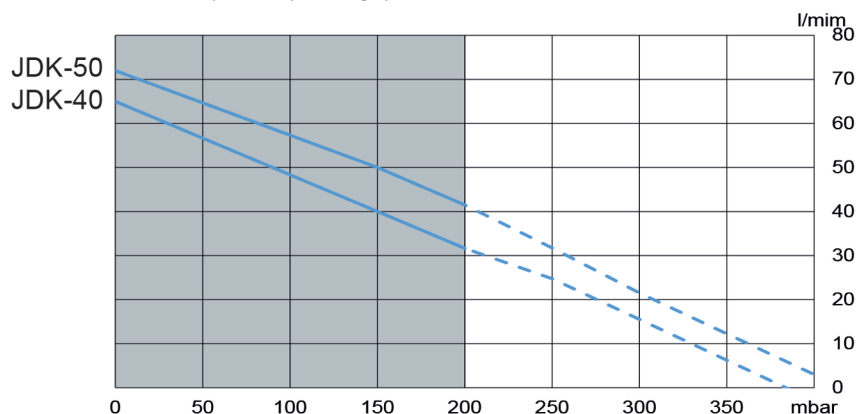
Technical Data

Model			JDK-40	JDK-50
Airflow	l/min	0 mbar	65	72
		50 mbar	59	65
		100 mbar	50	59
		150 mbar	43	50
		200 mbar	34	40
Voltage	V		230	
Power Consumption	W	200 mbar	35	42
Noise Level	dB(A)		33	36
Dimensions	mm	L x W x H	221 X 177 X 200	
Connection	mm	ø outside	19	
Net Weight	Kg		4.5	

1) Product performance may vary +/- 10% from performance curves. 2) Values at 50 Hz.

Performance Data

230V / 50 Hz, optimal operating span



Includes

- 3/4" Elbow Connection Hose Included



Spare Parts / Accessories

Spares	BIBUS Code
Service Kit	SE29
Diaphragm Sets	SE21
Filters	SE30
Magnets	SE4
Accessories	
Pressure Gauge	BP1
Pressure Relief Valve	SE11

Available Models	LED Service Light	Signal Cable	Low-Pressure Alarm
JDK-40 / 50			✓



JDK Series

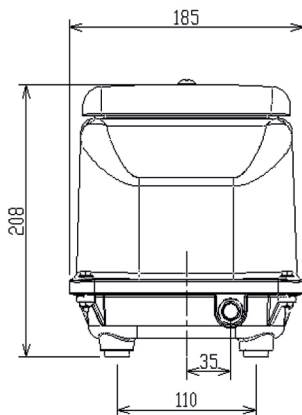
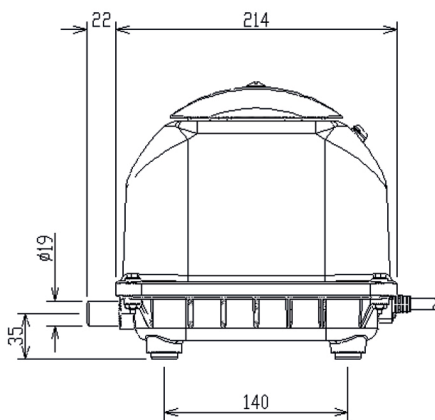
JDK - 60 / JDK - 80

Product Characteristics

- Compact Design
- Low Energy Consumption
- Protective Switch
- Aluminium Housing



Dimensions



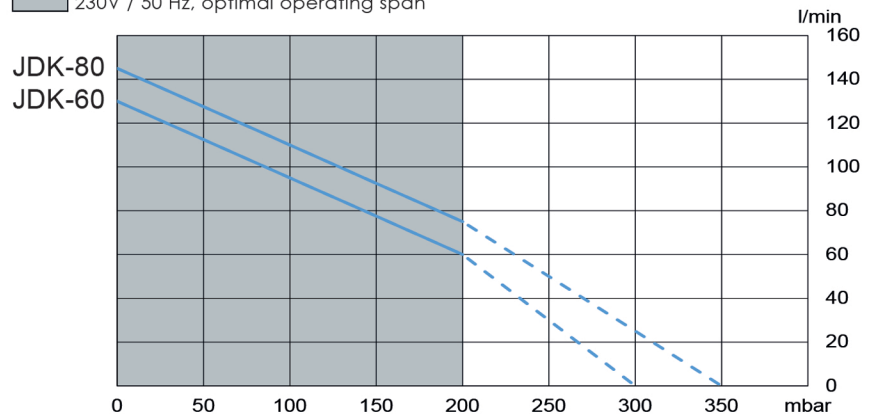
Technical Data

Model			JDK-60	JDK-80
Airflow	l/min	0 mbar	130	145
		50 mbar	125	130
		100 mbar	105	115
		150 mbar	85	90
		200 mbar	60	75
Voltage	V		230	
Power Consumption	W	200 mbar	40	50
Noise Level	dB(A)		36	38
Dimensions	mm	L x W x H	214 X 185 X 211	
Connection	mm	ø outside	19	
Net Weight	Kg		6.4	

1) Product performance may vary +/- 10% from performance curves. 2) Values at 50Hz.

Performance Data

230V / 50 Hz, optimal operating span



Includes

- 3/4" Elbow Connection Hose Included



Spare Parts / Accessories

Spares	BIBUS Code
Service Kit	SE22
Diaphragm Sets	SE24
Filters	SE28
Magnets	SE23
Autostopper	SK53204150
Accessories	
Pressure Gauge	BP1
Pressure Relief Valve	SE11

Available Models	LED Service Light	Signal Cable	Low-Pressure Alarm
JDK-80 / 60	✓	✓	✓



JDK Series

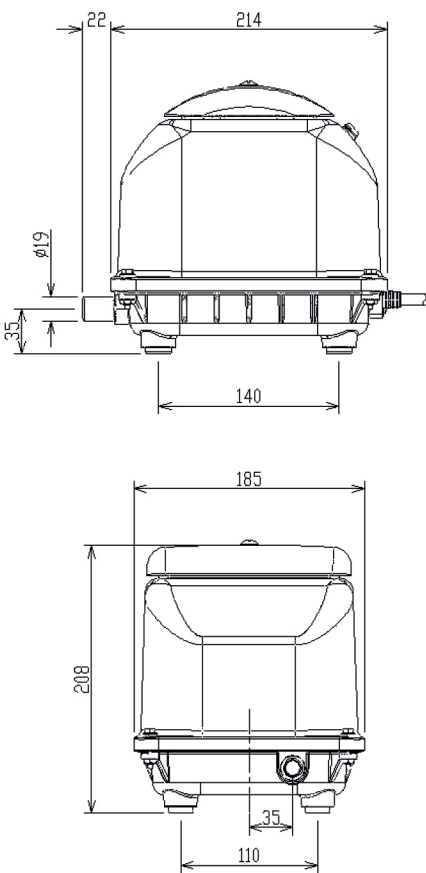
JDK - 100 / JDK - 120

Product Characteristics

- Compact Design
- Low Energy Consumption
- Protective Switch
- Aluminium Housing



Dimensions



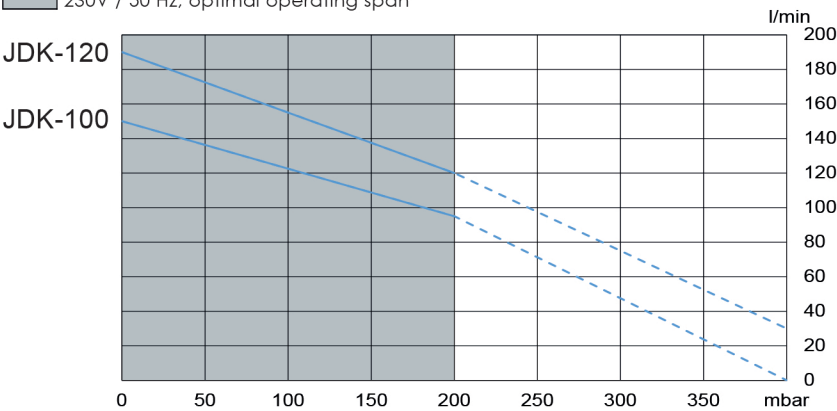
Technical Data

Model			JDK-100	JDK-120
Airflow	l/min	0 mbar	150	190
		50 mbar	145	180
		100 mbar	130	160
		150 mbar	110	140
		200 mbar	95	120
Voltage	V		230	
Power Consumption	W	200 mbar	75	95
Noise Level	dB(A)		42	45
Dimensions	mm	L x W x H	214 X 185 X 211	
Connection	mm	ø outside	19	
Net Weight	Kg		6.4	

1) Product performance may vary +/- 10% from performance curves. 2) Values at 50Hz.

Performance Data

230V / 50 Hz, optimal operating span



Spare Parts / Accessories

Includes

- 3/4" Elbow Connection Hose Included



Spares	BIBUS Code
Service Kit	SE31
Diaphragm Sets	SE24
Filters	SE28
Magnets	SE23
Autostopper	SK5205100*
Accessories	
Pressure Gauge	BP1
Pressure Relief Valve	SE11

*JDK-100 - SK53204150

Available Models	LED Service Light	Signal Cable	Low-Pressure Alarm
JDK-100 / 120	✓	✓	✓



JDK Series

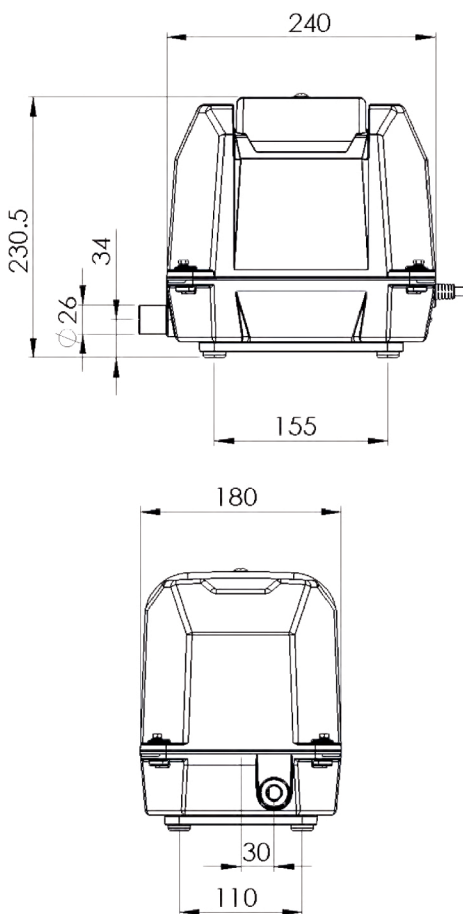
JDK - 150 / JDK - 200 / JDK - 250

Product Characteristics

- Simple Maintenance
- Aluminium Housing
- Thermal Trip
- Can run continuously @ 300 mbar



Dimensions



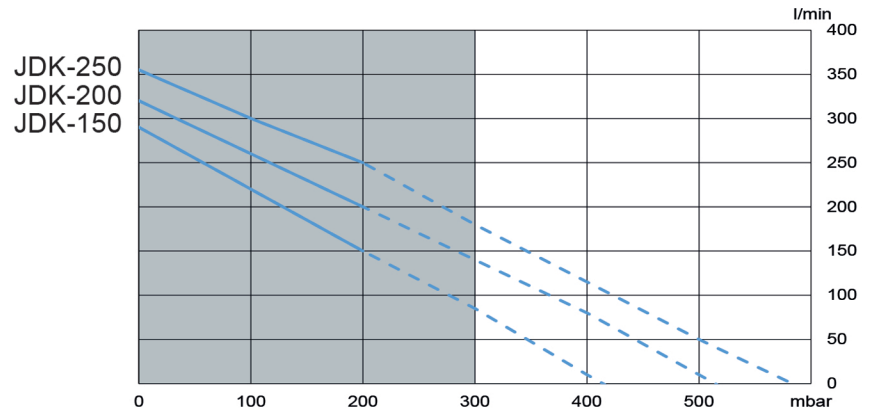
Technical Data

Model			JDK-150	JDK-200	JDK-250
Airflow	l/min	0 mbar	270	290	300
		50 mbar	240	270	325
		100 mbar	210	245	300
		150 mbar	180	220	270
		200 mbar	150	200	250
Voltage	V		230		
Power Consumption	W	200 mbar	115	180	225
Noise Level	dB(A)		44	46	52
Dimensions	mm	L x W x H	240 X 180 X 230.5		
Connection	mm	ø outside	26		
Net Weight	Kg		10		

1) Product performance may vary +/- 10% from performance curves. 2) Values at 50Hz.

Performance Data

230V / 50 Hz, optimal operating span



Includes

- 1" - 3/4" Pressure Relief Valve & Elbow Hose*



*Can be cut to 1" - 1" and to remove elbow

Spare Parts / Accessories

Spares	BIBUS Code
Service Kit	SE40
Diaphragm Sets	SE41
Filters	SE42
Magnets	SE43 / 44
Autostopper	SK53204150
Accessories	
Pressure Gauge	BP1
Pressure Relief Valve	SE45-L

Available Models	LED Service Light	Signal Cable	Low-Pressure Alarm
JDK-150 / 200 / 250	✓	✓	



JDK Twin Series

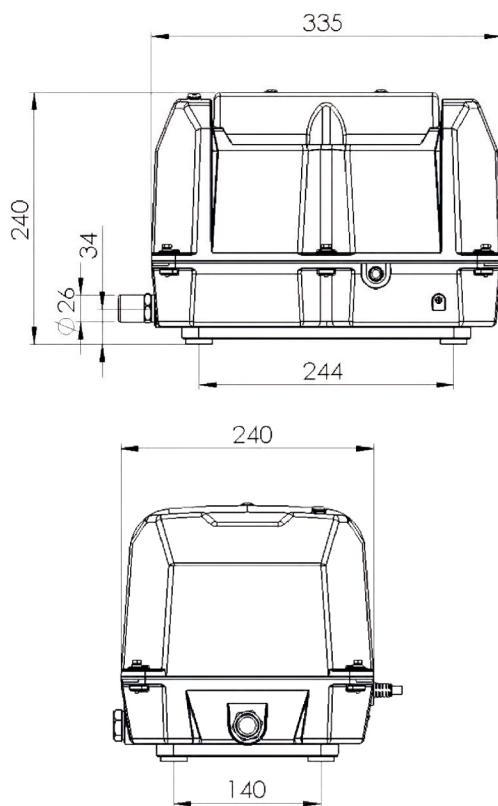
JDK - 300 / JDK - 400 / JDK - 500

Product Characteristics

- Simple Maintenance
- Aluminium Housing
- Thermal Trip
- Can run continuously @ 300 mbar



Dimensions



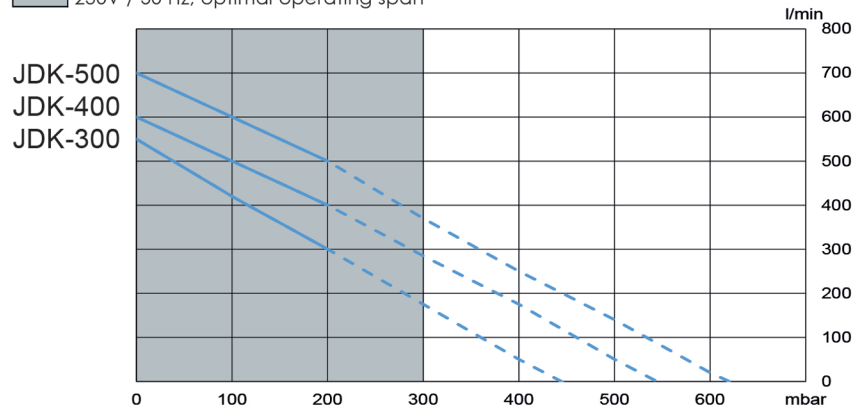
Technical Data

Model			JDK-300	JDK-400	JDK-500
Airflow	l/min	0 mbar	525	600	700
		50 mbar	480	560	655
		100 mbar	430	510	600
		150 mbar	375	460	545
		200 mbar	300	400	500
Voltage	V		230		
Power Consumption	W	200 mbar	230	360	450
Noise Level	dB(A)		52	54	58
Dimensions	mm	L x W x H	335 X 240 X 238.5		
Connection	mm	ø outside	27		
Net Weight	Kg		18		

1) Product performance may vary +/- 10% from performance curves. 2) Values at 50Hz.

Performance Data

230V / 50 Hz, optimal operating span



Includes

- 1" - 3/4" Pressure Relief Valve & Elbow Hose*



*Can be cut to 1" - 1" and to remove elbow

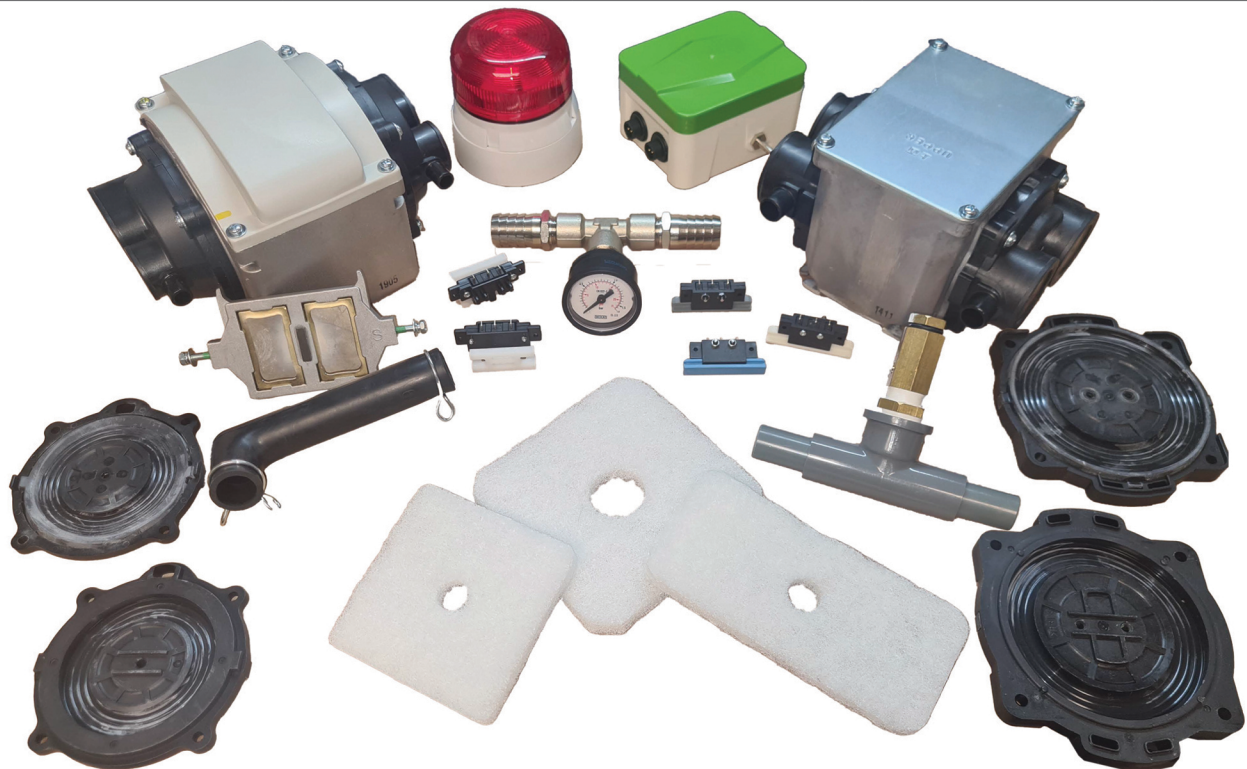
Spare Parts / Accessories

Spares	BIBUS Code
Service Kit	SE40*
Diaphragm Sets	SE41*
Filters	SE42*
Magnets	SE43 / 44*
Autostopper	SK53204150*
Accessories	
Pressure Gauge	BP1
Pressure Relief Valve	SE45-L

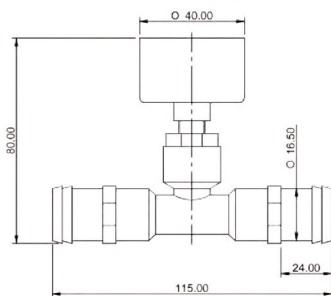
*Twin models require 2 parts per unit

Available Models	LED Service Light	Signal Cable	Low-Pressure Alarm
JDK-300 / 400 / 500	✓	✓	

Spare Kits and Accessories



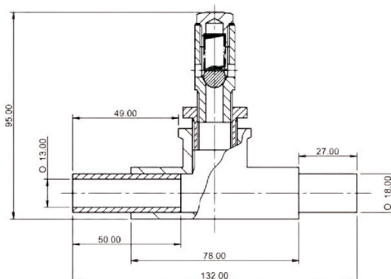
Back Pressure Gauge (BP1)



Pressure Gauge Range	0 - 0.6 bar
Dimensions (L x W x H)	115 x 40 x 80 mm
Connection	19Ø mm
Net weight	0.25 kg



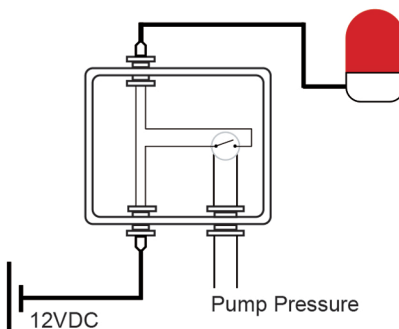
Pressure Relief Valve - JDK-50 / 120 (SE11)



Pressure Relief Setting	0.20 bar
Dimensions (L x W x H)	132 x 30 x 95 mm
Connection	19Ø mm
Net weight	0.5 kg



Pressure Alarm Box (BJD-HL)



Model		BJD-HL
Frequency	Hz	50/60
HIGH Alarm Pressure	kPa	> 2
LOW Alarm Pressure	kPa	< 7
Voltage*	VAC	100-240
Power Consumption	W	3
Noise Level	dB(A)	70
Net Weight	Kg	0.9





Disc Diffusers

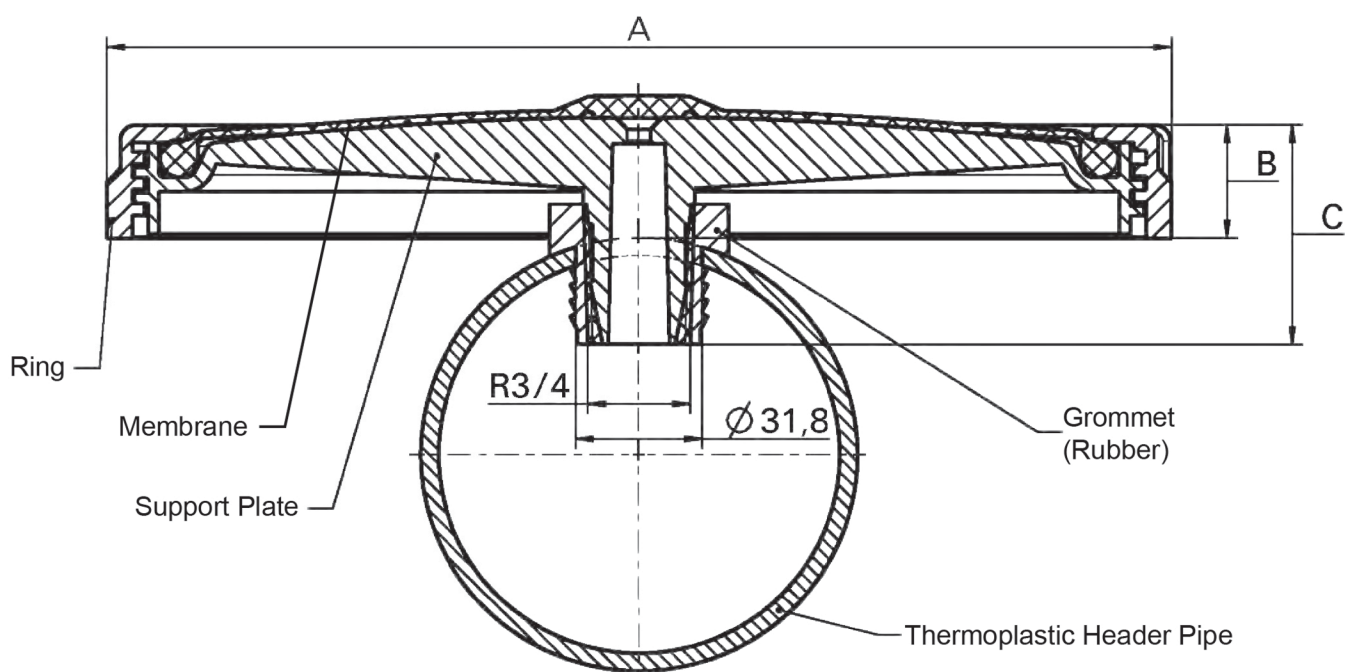
HD 270 / HD 340

Product Characteristics

- Low Installation Cost
- High Reliability
- Great Oxygen Transfer Efficiency Rate
- Low Maintenance
- Cost Effective Design

Dimensions

Type	Height (C) mm	Diameter Total (A) mm	Diameter Effective mm	Overall Height Membrane (B) mm	Perforated Area m ²	Disc Material	Membrane Material	Total Weight Kg
HD 270	58	270	220	30	0.037	PP GF 30	EPDM	0.6
HD 340	76	340	310	46	0.06	PP GF 30	EPDM	0.85



Type	Permitted Wall Thickness of Header Tube mm	Diameter Straight-Drilled Hole mm	Material	Colour
Universal Saddle	2-8	31.8 (1 1/4")	EPDM 75 Sh A	Black

Properties of Membranes

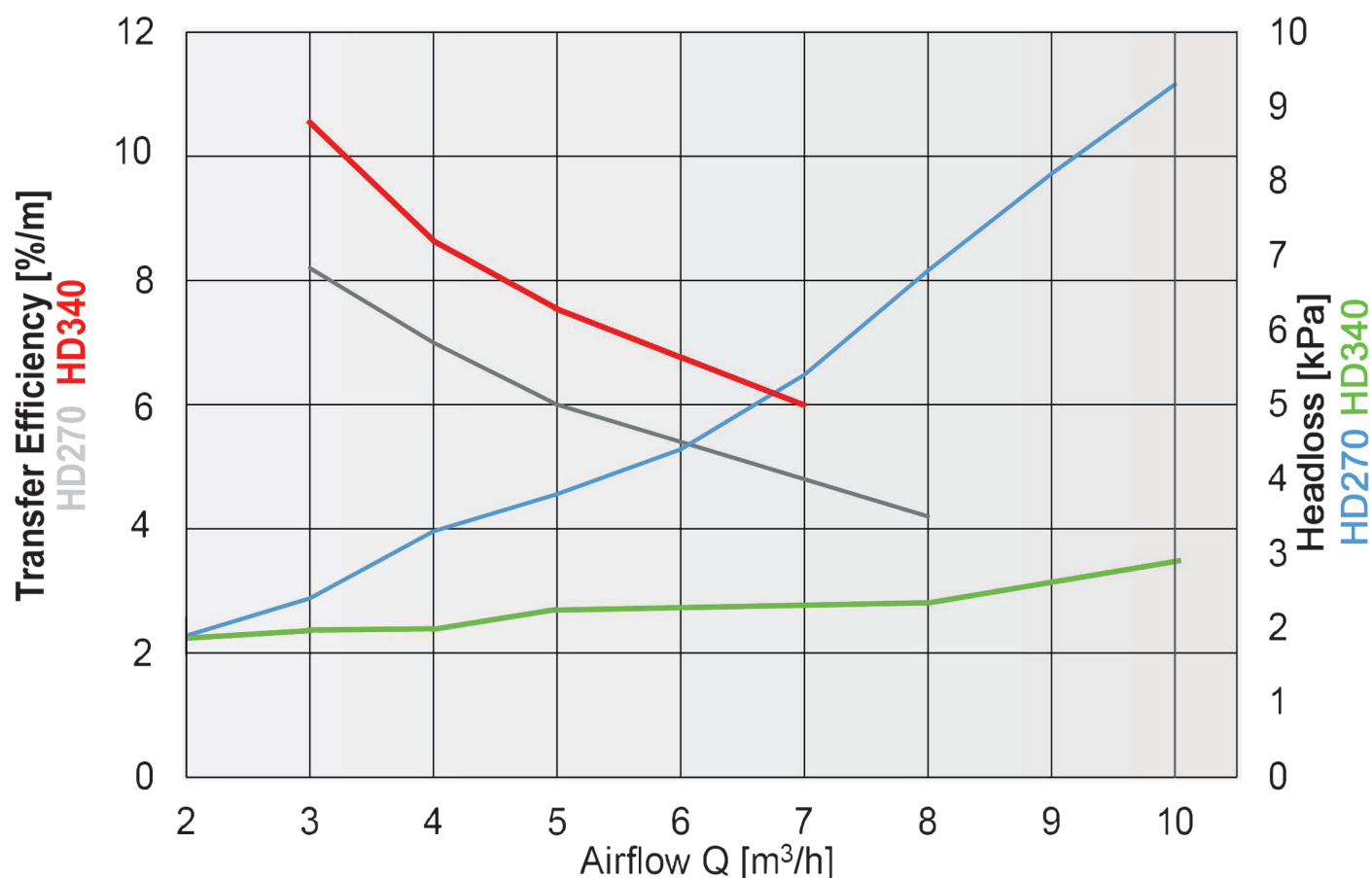
Material	EPDM F 053 A
Colour	Black
Wall Thickness	2.0 mm ± 0.15 mm
Density DIN 53479	<1.2 g/cm ³
Tensile Strength DIN 53504	> 7 N/mm ²
Elongation on Break DIN 53504	> 500 %
Tear Strength DIN 53507	> 6 N/mm
Hardness DIN 53505	50 ± 5 Shore A
Tension Set 100% Tension 24 h, RT	< 5 %
Operating Temperature	0 to 80°C
Application	Municipal Waste Water

Accessories



Oxygen Transfer Efficiency and Headloss

Disc Diffusers HD270 / HD340



Airflow

- The operating conditions depend on the selected material and the slot
- Non-standard slots are provided on request
- Shutdown of operation is highly recommended for airflow rates lower than the minimum rate
- Overload airflow rate should not be applied for longer than 10 minutes per day.

Type	Operation Conditions m_N^3/h	Max. Overload / Maintenance m_N^3/h
HD 270	1.5 - 6	10
HD 340	2 - 10	15



Tube Diffuser

TD65-500 / TD65-750 / TD65-1000

Product Characteristics

- Low Installation Cost
- High Reliability
- Great Oxygen Transfer Efficiency Rate
- Low Maintenance
- Cost Effective Design

Other lengths and materials may be available on request.

Dimensions

Type	Perforation Length mm	Total Length mm	Tube Diameter mm	ID-Sleeve mm	Perforated Area m ²	Total Weight Kg
TD65-500	500	560	63	64-66	0.09	0.8
TD65-750	750	810	63	64-66	0.135	1.1
TD65-1000	1000	1060	63	64-66	0.18	1.3

Dimensions for Threads and Double Nipple

Connector	Colour Code Diffuser	Double Nipple Length for Square Tube 80 x 80 mm	Double Nipple Length for Square Tube 100 x 100 mm	Double Nipple Length for Tube DN 100mm (114.3 mm)
1" Whitworth	Black	130	150	190
3/4" Whitworth	Black	130	150	-

Two tube diffusers are assembled at one round or square supporting tube by a connector.

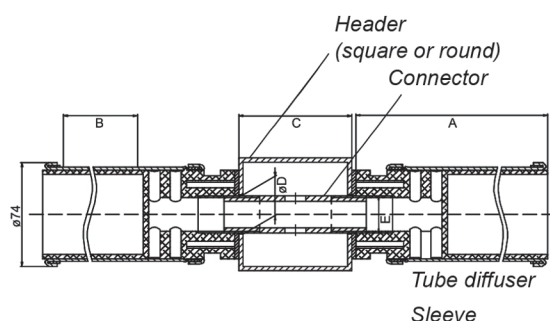
The tube requires a rubber gasket adjusted to its diameter.

Double nipples for other tube diameters are available on request.

Connection of the membrane to the support tube:

Standard secure clamp (Stainless steel, 1.4301). Exchange of the membrane is possible without the dismantling of the supporting body.

Gasket for Square Tube: 4mm EPDM flat-gasket
Gasket for tube DN 100: EPDM gasket



A	1060				810				560				Diffuser Length
B	1000				750				500				Perforation Length
C	80		100		80		100		80		100		Square tube
D	28	35	28	35	28	35	28	35	28	35	28	35	Straight-Drilled Hole
E	³ / ₄	1"	³ / ₄	1"	³ / ₄	1"	³ / ₄	1"	³ / ₄	1"	³ / ₄	1"	Thread

Properties of Membranes

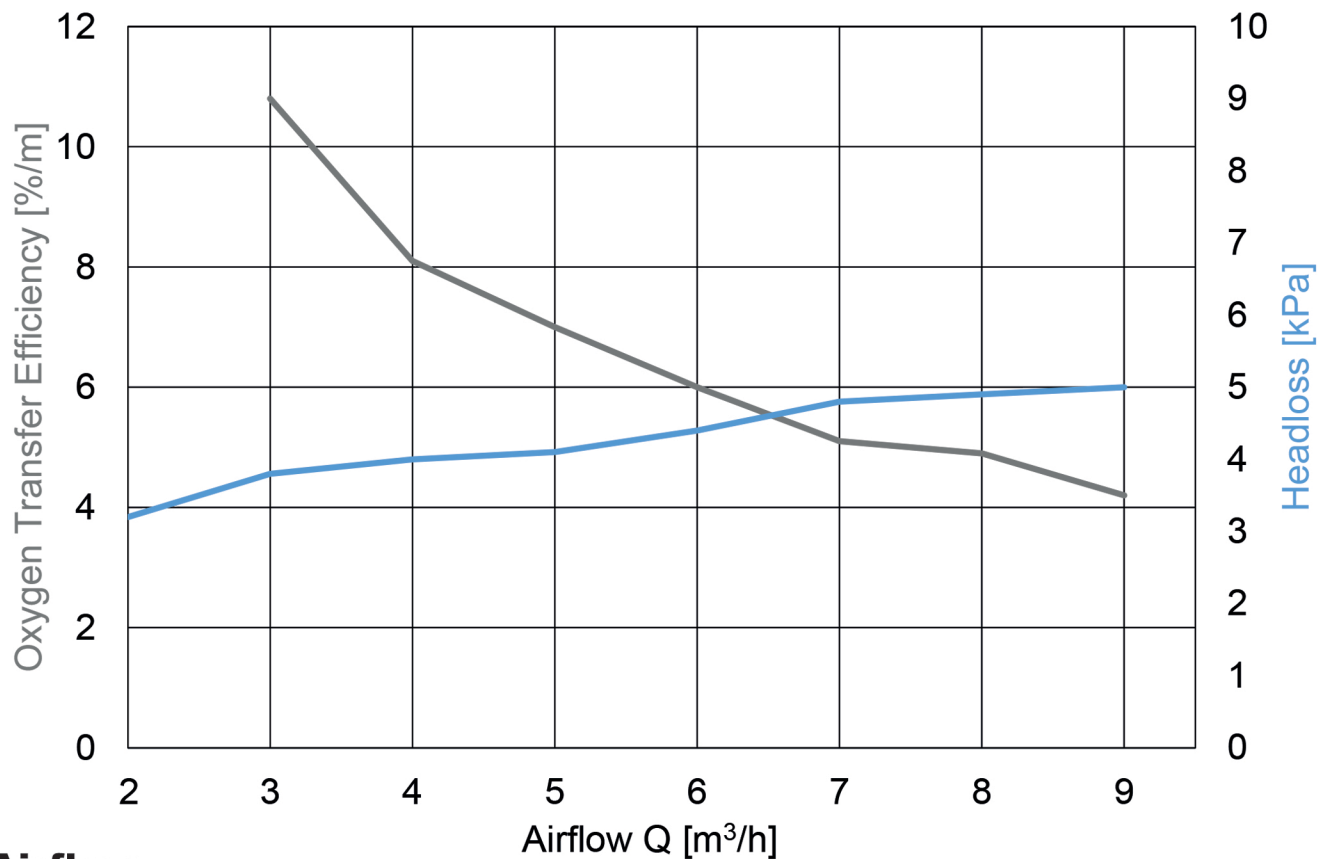
Material	EPDM 7311 / 003
Colour	Black
Wall Thickness	1.9 mm ± 0.2 mm
Diameter	65 mm ± 1.9 mm
Density DIN 53479	<1.15 g/cm ³
Tensile Strength DIN 53504	> 8 N/mm ²
Elongation at Break DIN 53504	> 500 %
Tear Strength DIN 53507	> 8 N/mm
Hardness DIN 53505	40 ± 5 Shore A
Tension Set 100% Tension 24 h, RT	< 4 %
Operating Temperature	0 to 80°C
Application	Municipal Waste Water

Accessories



Oxygen Transfer Efficiency and Headloss

Tube Diffuser TD65-1000 with Hose



Airflow

- The operating conditions depend on the selected material and the slot
- Non-standard slots are provided on request
- Shutdown of operation is highly recommended for airflow rates lower than the minimum rate
- Overload airflow rate should not be applied for longer than 10 minutes per day.

Type	Operation Conditions m_N^3/h	Max. Overload / Maintenance m_N^3/h
TD65-500	1 - 6	10
TD65-750	2 - 9	15
TD65/1000	3 - 12	20

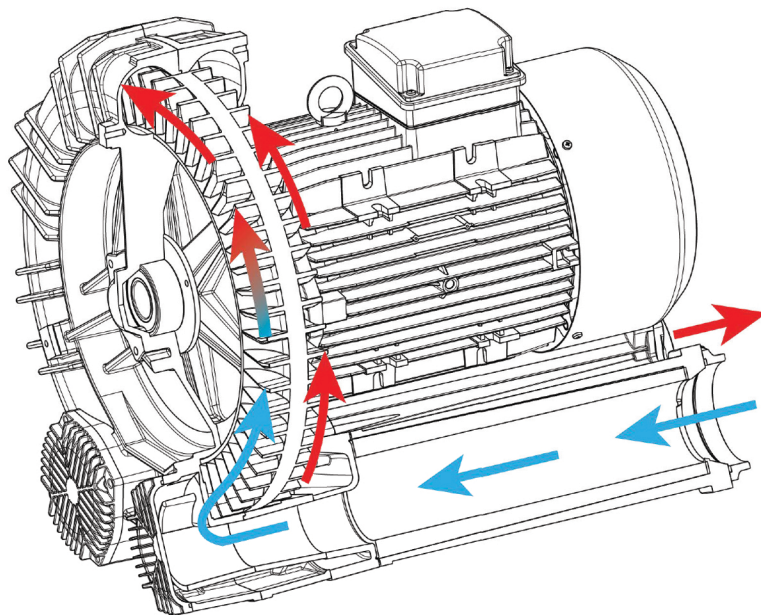
Operating Principle

A side channel blower consists of an impeller with blades mounted directly to a motor shaft and located in a close tolerance housing. When the impeller is rotating, the channels in the impeller push air forward by centrifugal movement and produce's pressure or partial vacuum through silencer tubes.



Advantages of FPZ

- No Contact among Parts
- Low Noise Level
- No Pulsation
- No Fluid Contamination
- Compact Size



Technical Specifications

- Aluminium Alloy Construction
- Low Noise Level
- Pressure & Vacuum Applications
- Electric Motors
- High Efficiency: IE3
- IP55 Motors Insulation Class F
- PTO Thermal Protection
- Single Phase Motor up to 2.2kW
- Three Phase Motor up to 26kW
- Special Voltages IEC 60038

Selecting the Blower Size

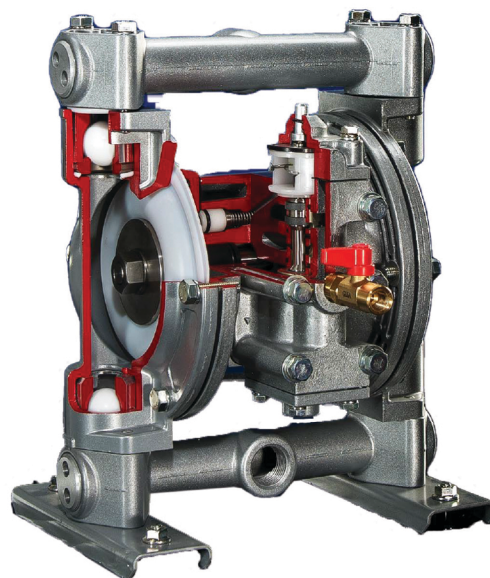
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We are happy to advise the correct pump for your application.



Operating Principle

AODD pumps operate by the alternated back-and-forth movement of two flexible diaphragms mounted on a common shaft. A given amount of air pressure and air volume is required to deliver the appropriate amount of fluid. AODD pumps are capable of handling abrasive, highly viscous fluids, sludges, slurries, and shear-sensitive fluids.



Advantages of Yamada

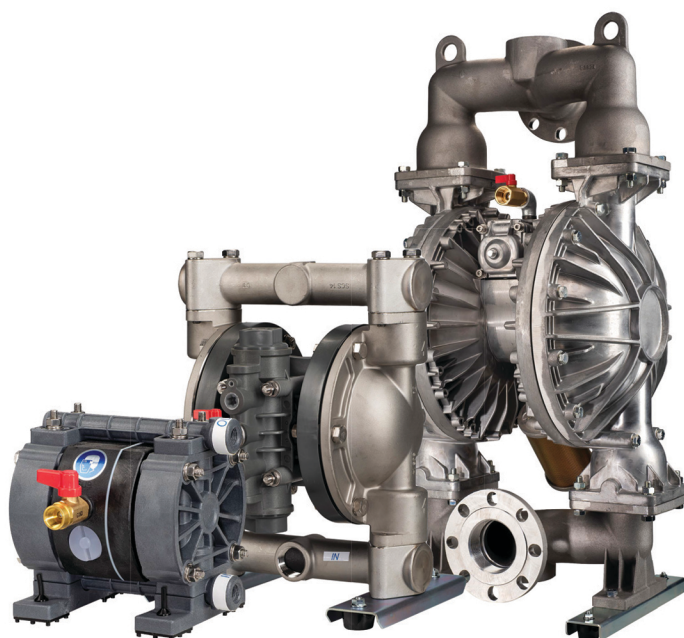
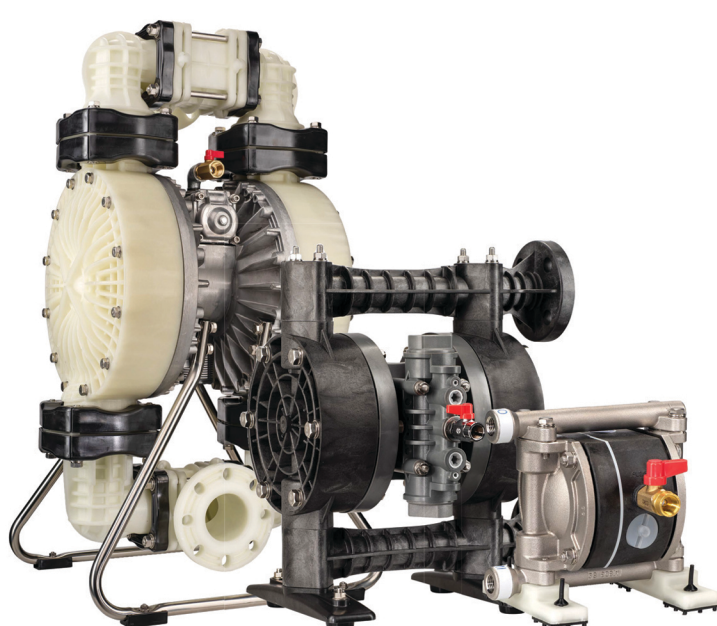
- Can handle a variety of fluids with particles
- Self Priming
- Explosion Proof
- Constant Pumping
- Variable Flow Rates & Discharge Pressure
- Simple Installation
- Submersible
- Low Maintenance

Applicable Sectors

- Paints
- Ink & Printing
- Ceramics
- Marine & Ship Building
- Mining
- Waste Water
- Cosmetics
- Construction

Selecting the Pump Size

Different manufacturers' pumps perform differently. Therefore, we recommend comparing performance data to ensure an accurate replacement. With a wide range of materials available depending on the application and fluid being pumped, we are happy to help advise the correct pump.

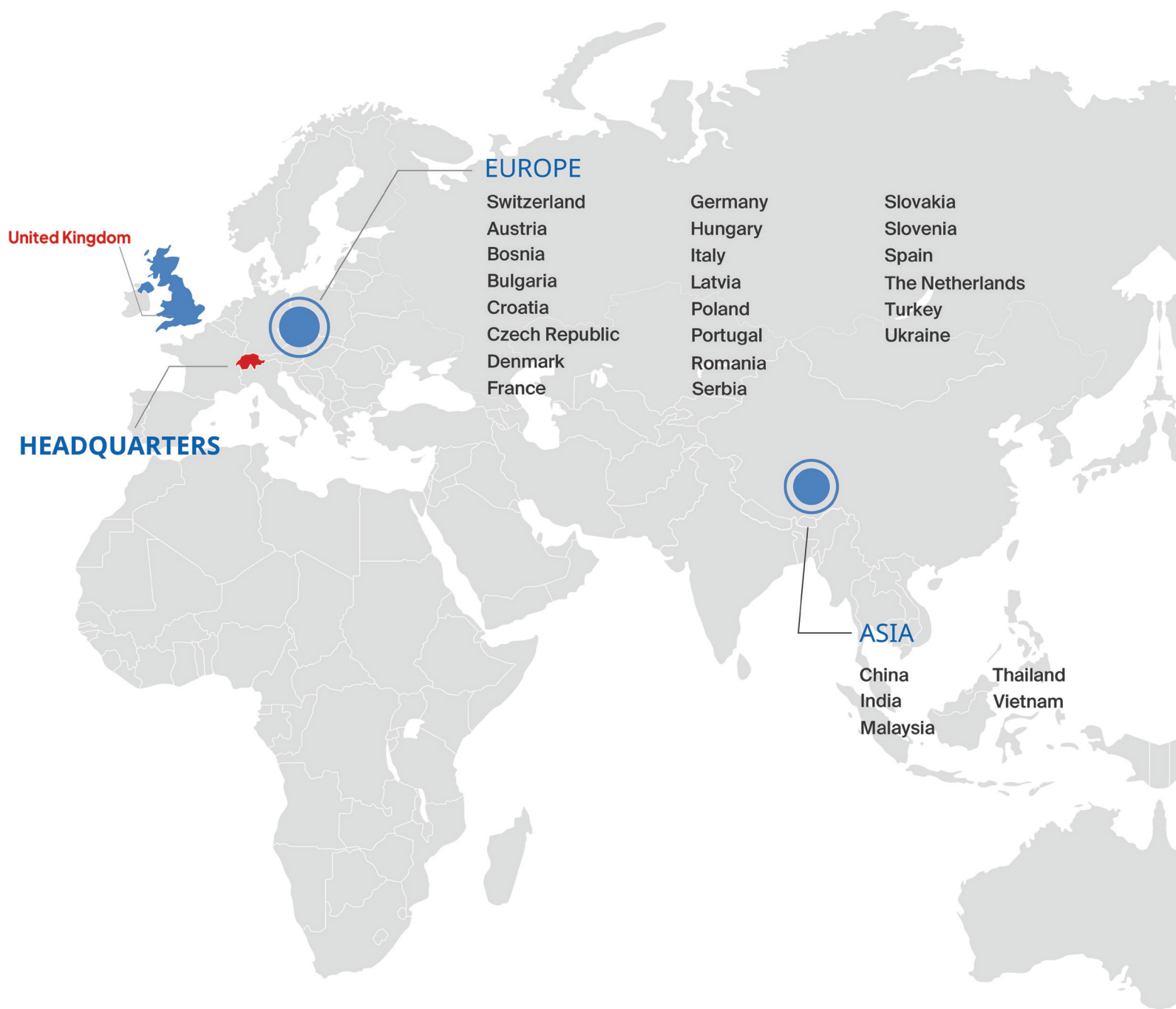


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