



Axflo Pump Solution

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Authorised channel partner in INDIA

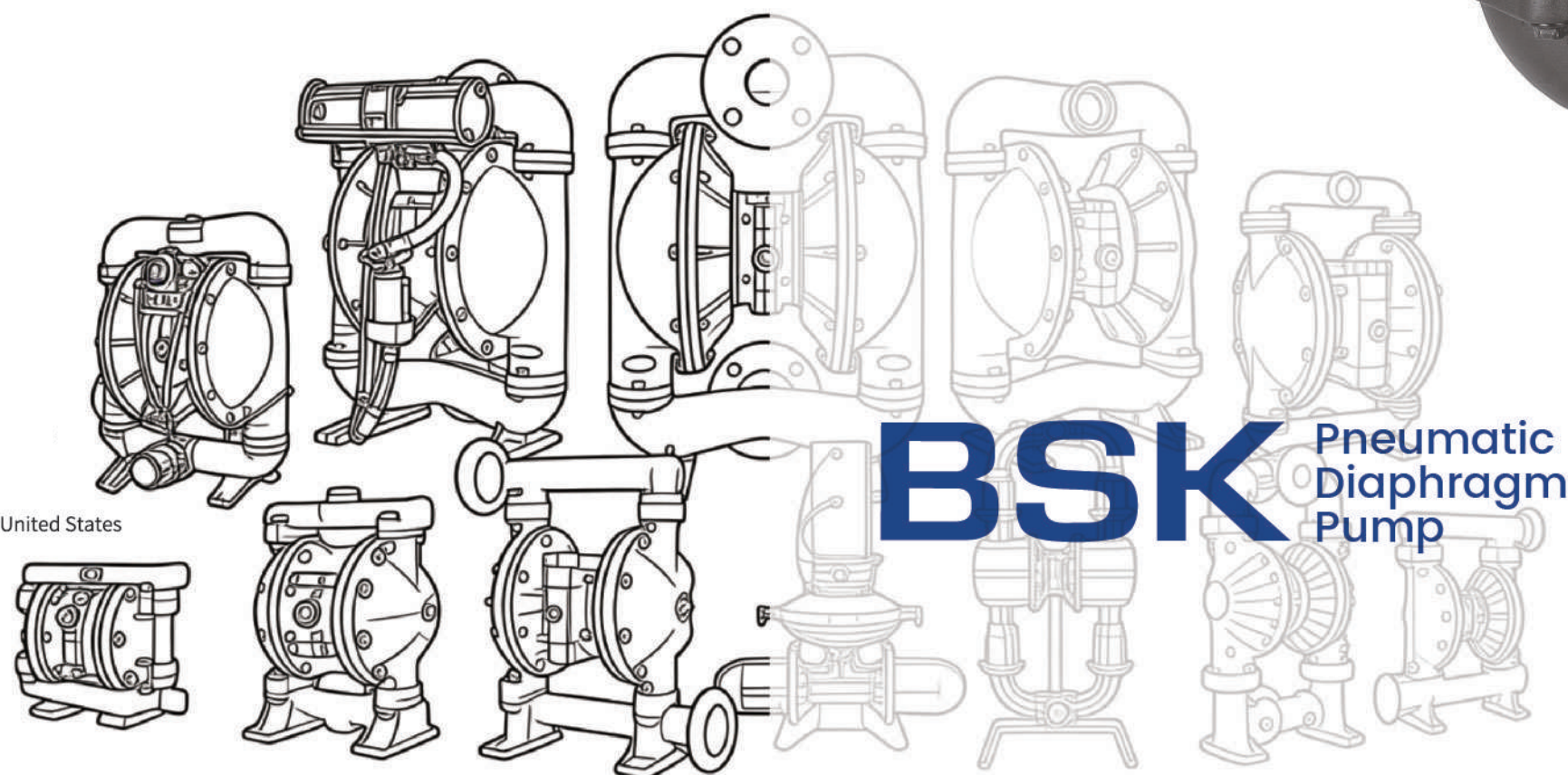
BSK FLUID TECHNOLOGY LLC.

ADD(USA): 2300 McDermott RD Ste200-336 Plano, TX 75025 United States

Tel(USA): +1 424 475 0889 Fax: +1 972 238 1161

Http: www.bskfluid.com

BN: BSK-CN-H-202510

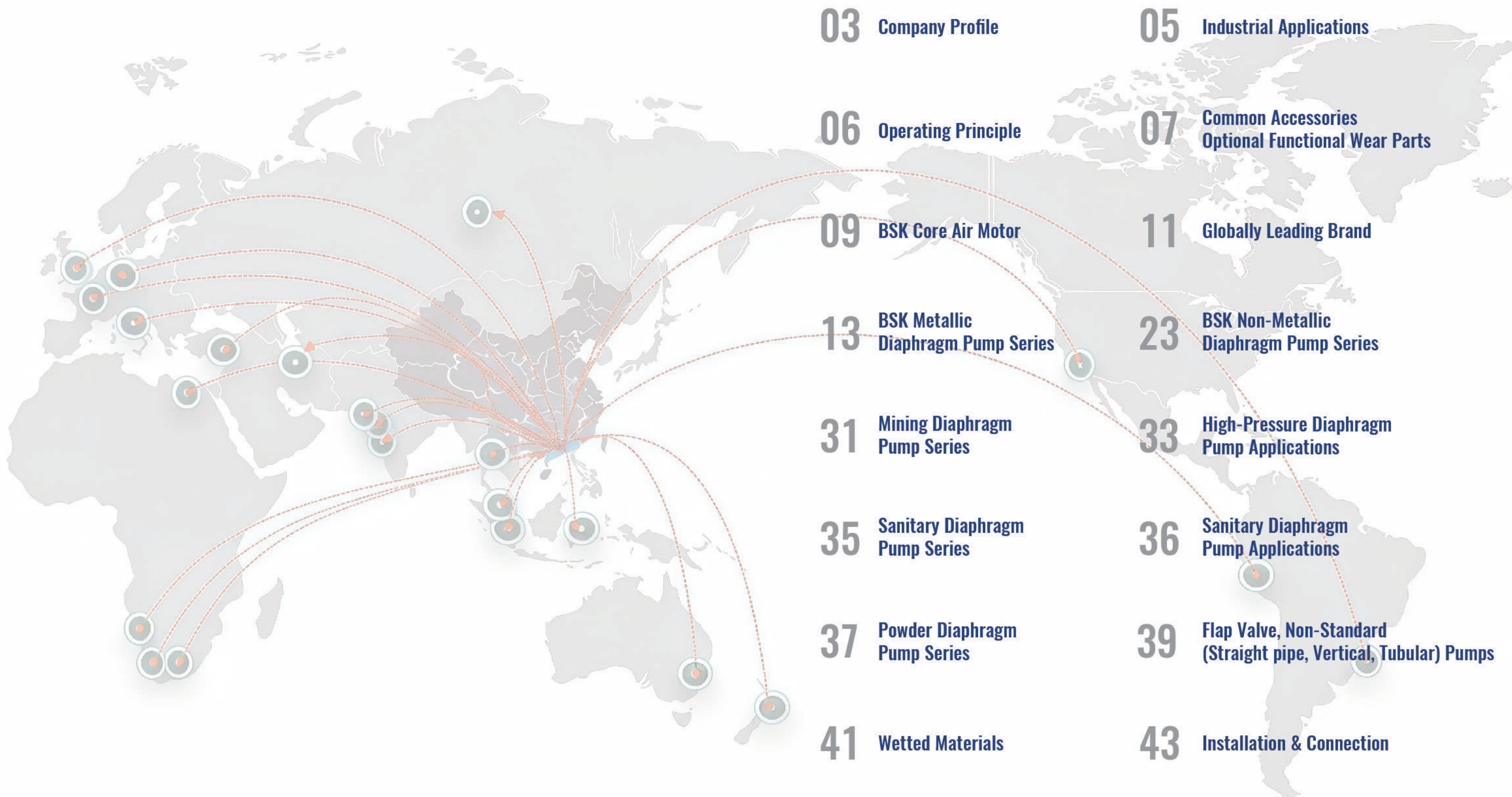


BSK Pneumatic
Diaphragm
Pump



Since 1989

CONTENTS



03 Company Profile

05 Industrial Applications

06 Operating Principle

07 Common Accessories
Optional Functional Wear Parts

09 BSK Core Air Motor

11 Globally Leading Brand

13 BSK Metallic
Diaphragm Pump Series

23 BSK Non-Metallic
Diaphragm Pump Series

31 Mining Diaphragm
Pump Series

33 High-Pressure Diaphragm
Pump Applications

35 Sanitary Diaphragm
Pump Series

36 Sanitary Diaphragm
Pump Applications

37 Powder Diaphragm
Pump Series

39 Flap Valve, Non-Standard
(Straight pipe, Vertical, Tubular) Pumps

41 Wetted Materials

43 Installation & Connection

Company Profile »

BSK – A Globally Leading Positive-Displacement Pump Brand

For more than 30 years, BSK has provided reliable products and professional services to distributors and users in over 50 countries and regions worldwide.

Our primary product line consists of air-operated diaphragm pumps for general industrial applications, powder transfer air-operated diaphragm pumps, food- and pharmaceutical-grade tubular pneumatic pumps, mining-grade safety air-operated diaphragm pumps, and high-pressure-output air-operated diaphragm pumps. Our core markets encompass lithium-battery manufacturing, food and pharmaceuticals, coatings, electronics, petrochemicals, environmental protection, water treatment, and other industrial sectors. In addition to conventional fluids, BSK products deliver exceptional performance when handling corrosive, highly abrasive, highly viscous, large-particle, and powdered media, thereby creating greater value for our customers.

In 2007, as globalization accelerated, BSK relocated its U.S. technology R&D center to Guangdong Province, China. By leveraging China's robust supply chain and advanced technological R&D capabilities, the company continuously updated and iterated its products to meet the diverse needs of global customers across different environments, industries, and with varying requirements.



ISO 9001 Certificate



FDA Certificate



CE Certificate

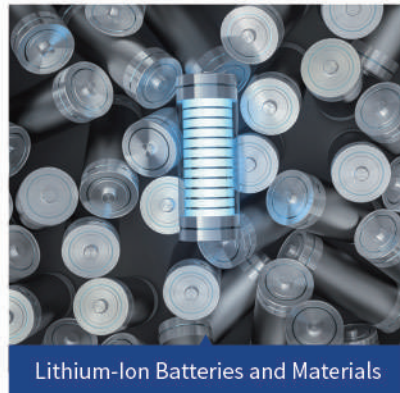


MA Certificate



Patent Certificates

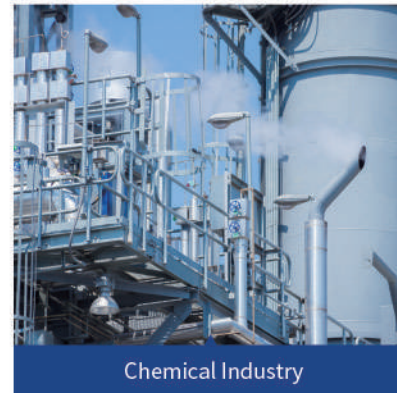
Industrial Applications »



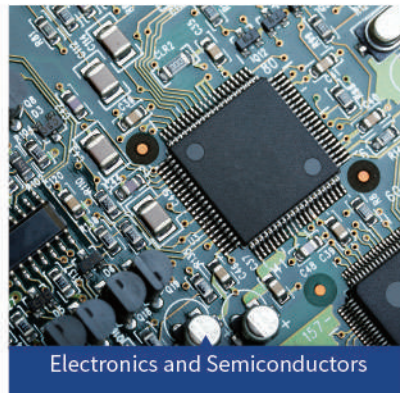
Lithium-Ion Batteries and Materials



Bio-pharmaceuticals



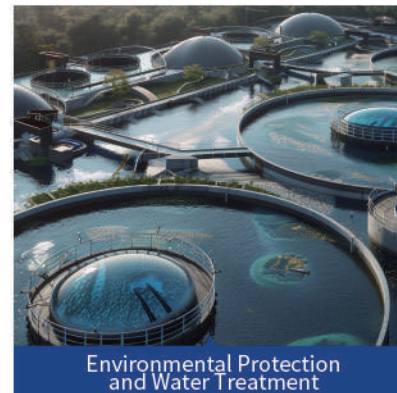
Chemical Industry



Electronics and Semiconductors



Paints and Coatings



Environmental Protection and Water Treatment

【Applications】

Maritime

(Emission and Transportation)

Wastewater
Seawater
Diesel fuel

Electronics

(Discharge and Transfer)

Wastewater
Strong acids
Strong alkalis

Coal Mining

(Drainage)

Dust-suppression spraying
Roadway drainage
Lubricating-oil filling

Medicine

(Supply and Transfer of Food and Pharmaceutical Materials)

Pharmaceutical intermediates

Dairy products
Meat products
Condiments

Chemical Production

(Mixing and Transfer)

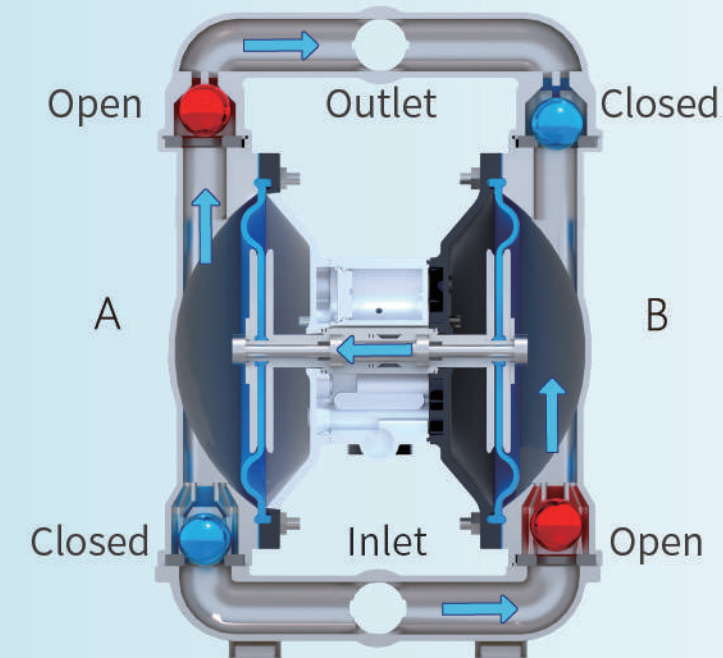
Detergents
Cleaners/polishes
Paints/dyes
Adhesives
Inks

Automotive

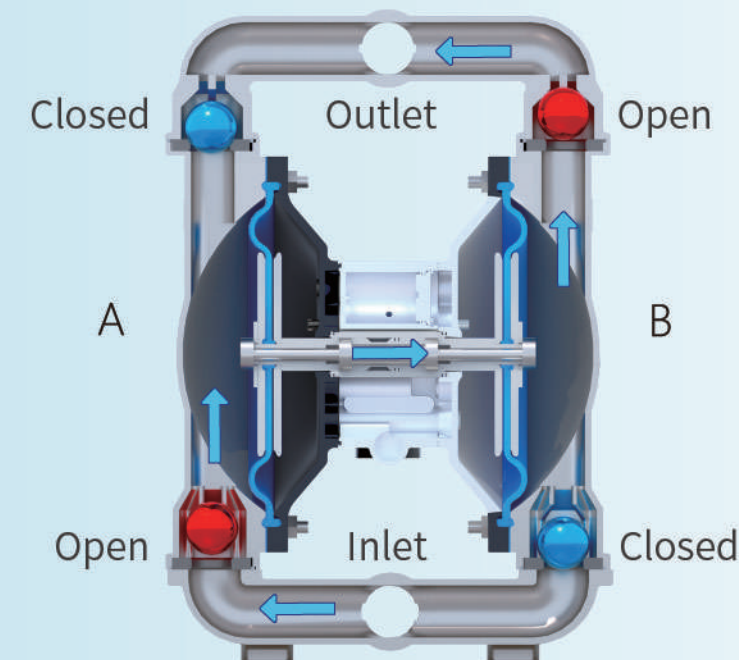
(Supply and Transfer)

Sealants
Adhesives
Electroplating solutions
Solvents
Paints

Operating Principle »



Compressed air enters through the air-valve connection and is directed into the left air chamber, behind diaphragm A. The compressed air pushes diaphragm A away from the center section toward the fluid chamber. Diaphragm B is pulled by the common shaft connected to the pressurized diaphragm A. Diaphragm B is now on its suction stroke, while the air behind it is discharged to atmosphere through the pump exhaust. As diaphragm B moves toward the center section, it creates a vacuum in the fluid chamber. Atmospheric pressure forces fluid into the pump inlet manifold, lifting the ball from its seat so that fluid flows freely past the lower-right ball and fills the fluid chamber.



When pressurized diaphragm A reaches the end of its travel, the diaphragm plate actuates the reversing system, directing compressed air to the back of diaphragm B. Air pressure pushes diaphragm B away from the center section, while the connected shaft pulls diaphragm A toward the center section. Air in chamber A is exhausted to atmosphere through the pump exhaust. Diaphragm B is now on its discharge stroke while diaphragm A is on its suction stroke. Hydraulic pressure generated in the fluid chamber and pump manifold presses the lower-right inlet ball onto its seat and lifts the upper-right outlet ball from its seat. The upper-left outlet ball remains closed, and fluid is discharged through the right-hand outlet manifold. As diaphragm A moves toward the center section, it creates a vacuum in the fluid chamber. Atmospheric pressure forces fluid into the pump inlet, lifting the lower-left inlet ball from its seat and allowing fluid to enter the left-hand fluid chamber.

Common Accessories - Optional Functional Wear Parts »



PTFE

- ♦ Advantage: Good corrosion resistance
- ♦ Disadvantage: Average wear resistance
- ♦ Temperature range: 4.4°C-104°C

Hytrel®

- ♦ Advantages: Good flexibility; good resistance to organic solvents
- ♦ Disadvantage: Not resistant to acids or alkalis
- ♦ Temperature range: -28.9°C-65.5°C

Nitrile Rubber / NBR

- ♦ Advantage: Resistant to organic solvents
- ♦ Disadvantage: Not resistant to strong acids or alkalis
- ♦ Temperature range: -12°C-82°C

Santoprene®

- ♦ Advantages: Good wear resistance; good heat resistance; resistant to 20% acid/alkali solutions
- ♦ Disadvantage: Not resistant to organic solvents
- ♦ Temperature range: -40°C-107.2°C

Fluoroelastomer / FKM

- ♦ Advantage: Good corrosion resistance
- ♦ Disadvantage: Poor wear-resistant, highly malleable
- ♦ Temperature range: -10°C-200°C

Extra-Long Lifespan
8,000,000–20,000,000+ cycles

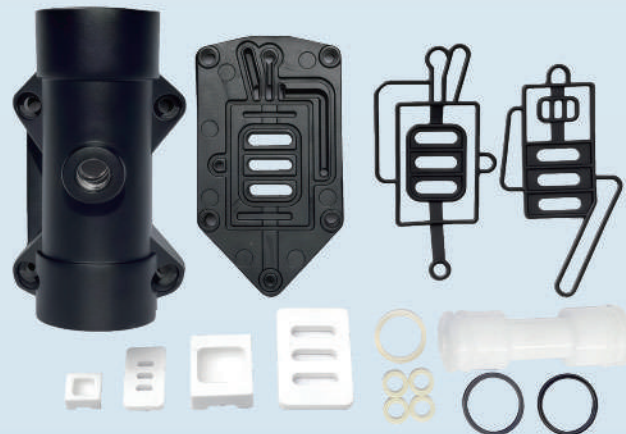
Durable
Stable

BSK Core Air Motor »

Air Distribution Valve: Simple in Design, Sophisticated in Performance

- + Optimized system design for easy disassembly
- + Fewer components for simplified maintenance

Note: Approximately 20% fewer components than other air-operated diaphragm pump brands



01 Corrosion Resistance

The surface is coated with an anti-corrosion coatings that resists attack by common chemicals.

02 Noise Reduction

The built-in exhaust chamber and external muffler effectively reduce exhaust noise and prevent equipment shutdown caused by condensate freezing.

03 Optimized Energy Efficiency

The contour of the diaphragm air chamber is reshaped through simulation to reduce air consumption space and improve the utilization rate of compressed air.

04 Simplified Structure

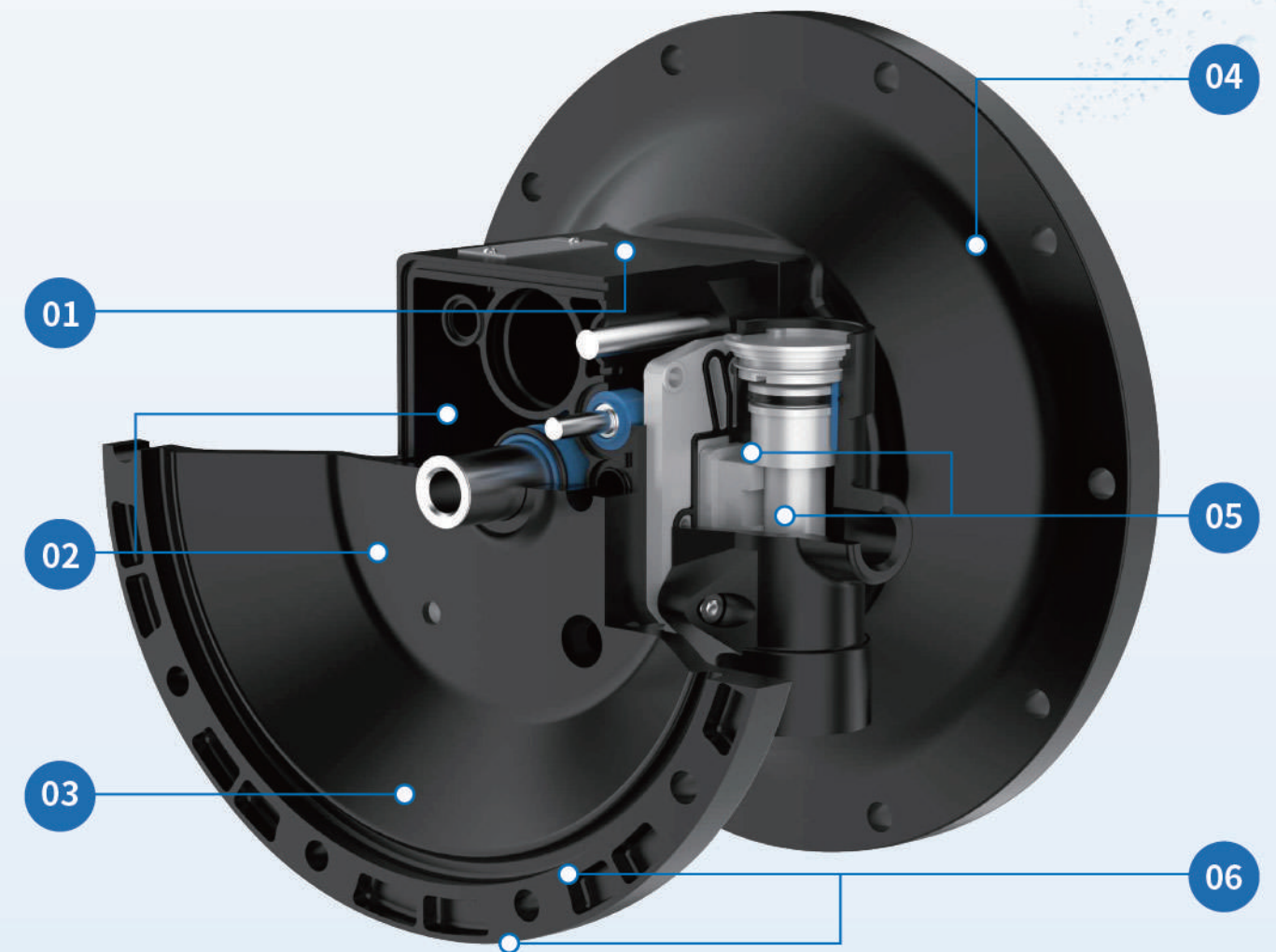
Adopting a modular structure, with high component commonality, reduces component inventory and lowers maintenance costs.

05 Patented Main Valve

The core air distribution valve and reversing valve adopt a patented isolation plate valve, which is wear-resistant, dirt-tolerant, and requires no lubrication.

06 Reliable Sealing

Adopting a groove-sealing and bolt-clamping structure ensures more reliable sealing around the diaphragm.

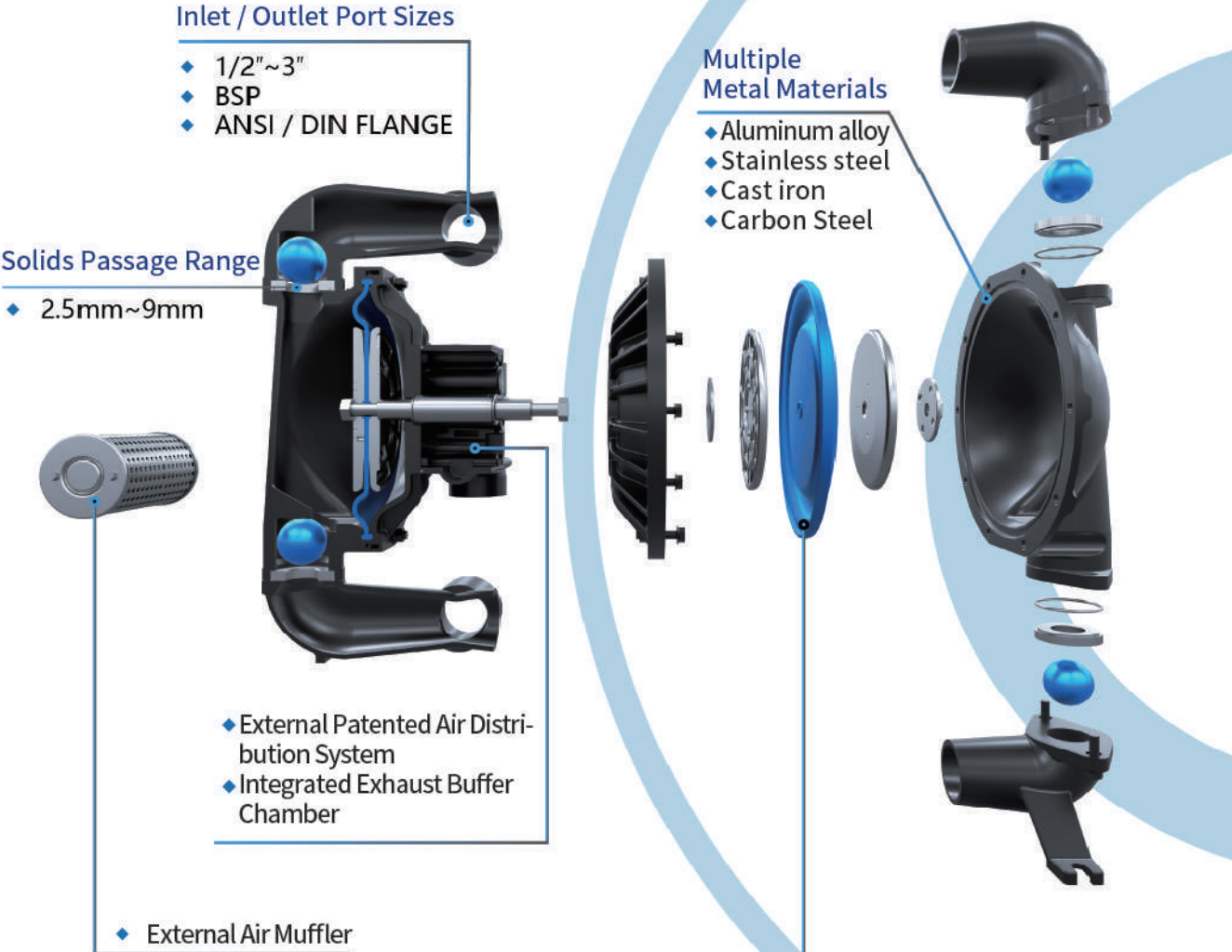


Globally Leading Brand »

For over 30 years, BSK has provided reliable products and professional services to distributors and end-users across more than 50 countries and regions worldwide. In 2007, as globalization accelerated, BSK relocated its U.S. technology R&D center to Guangdong Province, China. By leveraging China's robust supply chain and R&D capabilities, BSK has continually updated and improved its products to serve customers worldwide across diverse environments, industries, and requirements.



BSK Metal Pumps Series



Multiple Metal Materials

- ◆ Aluminum alloy
- ◆ Stainless steel
- ◆ Cast iron
- ◆ Carbon Steel

◆ Multiple diaphragm materials for different liquids & materials and operating conditions

Maximum Dry Suction Lift

- ◆ 3.4m~6.7m

Flow Rate and Lift Head Adjustment

- ◆ The flow rate and outlet pressure can be adjusted simply by regulating the air supply; maximum outlet pressure is up to 8.3 bar (120 psi).

Metallic Pump Selection Table (BP/BA/CA)

Model: BA/BP/CP XX XX- X X X X- X (X X)
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① SIZE	② HOUSING	③ BALL SEAT	④ BALL	⑤ DIAPHRAGM	⑥ O-RING	⑦ PORT	⑧ Code for special order
15=1/2" 20=3/4" 25=1" 40=1 1/2" 50=2" 80=3"	AL=Aluminum Alloy SS=Stainless Steel CI=Cast Iron CS=Carbon Steel	P=UPE S=Stainless Steel C=Carbon Steel O=Aluminum Alloy 9=Santoprene® D=POM T=PTFE	9=Santoprene® S=Stainless Steel T=PTFE 8=Santoprene® w/steel core B=NBR H=Hytrell	9=Santoprene® T=PTFE/Santoprene® H=Hytrell B=NBR V=FKM	0=None 1=NBR 2=EPDM 3=PTFE(Full) 4=PTFE(COVER) 5=FKM	A=BSP(thread) B=NPT C=Flange T=Middle port G=Top Threaded Port	

Model: CA/CP XX XX- X X X X- X (X X)
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① SIZE	② HOUSING	③ BALL SEAT	④ BALL	⑤ DIAPHRAGM	⑥ O-RING	⑦ PORT	⑧ Code for special order
50=2" 80=3"	AL=Aluminum Alloy SS=Stainless Steel CI=Cast Iron CS=Carbon Steel	P=UPE S=Stainless Steel C=Carbon Steel O=Aluminum Alloy 9=Santoprene® D=POM T=PTFE	9=Santoprene® S=Stainless Steel T=PTFE 8=Santoprene® w/steel core B=NBR H=Hytrell	9=Santoprene® T=PTFE/Santoprene® H=Hytrell B=NBR V=FKM	0=None 1=NBR 2=EPDM 3=PTFE(Full) 4=PTFE(COVER) 5=FKM	A=BSP(thread) B=NPT C=Flange T=Middle port G=Top Threaded Port	

Metallic Pump Flow Rate Specification Table

PORT SIZE	AIR INLET	FLUID INLET	FLUID OUTLET	PORT CONNECTION	MAX. DRY SUCTION LIFT	MAX. FLOW RATE
1/2"	1/4" NPT	13mm/0.5"	13mm/0.5"	NPT/BSP Rp(Thread)	3.4 m	45 lpm
3/4"	1/4" NPT	20mm/0.75"	20mm/0.75"	BSP Rp(Thread)	4.8 m	86 lpm
1"	1/4" NPT	25mm/1"	25mm/1"	BSP(Thread)	6.7 m	192 lpm
1.5"	1/2" NPT	38mm/1.5"	38mm/1.5"	BSP(Thread) SMS(Tri-Clamp)	6.7 m	378 lpm
2"	3/4" NPT	51mm/2"	51mm/2"	BSP(Thread) ANSI/DIN(Flange)	6.2 m	667 lpm
3"	3/4" NPT	76mm/3"	76mm/3"	BSP(Thread) ANSI/DIN(Flange)	5.3 m	903 lpm

PORT SIZE	MAX. WORKING PRESSURE	MAX. PARTICLE SIZE	DISPLACEMENT PER STROKE	PUMP BODY MATERIAL	MAX. OPERATING TEMPERATURE
1/2"	6.9 Bar	2.5 mm	0.14 L	Aluminum Alloy, Stainless Steel, Carbon Steel	135°C(275°F)
3/4"	8.3 Bar	3 mm	0.45 L	Aluminum Alloy, Stainless Steel, Carbon Steel	135°C(275°F)
1"	8.3 Bar	3 mm	0.87 L	Aluminum Alloy, Stainless Steel, Carbon Steel	135°C(275°F)
1.5"	8.3 Bar	6 mm	2.83 L	Aluminum Alloy, Stainless Steel, Carbon Steel, Cast Iron	135°C(275°F)
2"	8.3 Bar	7 mm	3.78 L	Aluminum Alloy, Stainless Steel, Cast Iron	135°C(275°F)
3"	8.3 Bar	9 mm	7.67 L	Aluminum Alloy, Stainless Steel, Cast Iron	135°C(275°F)

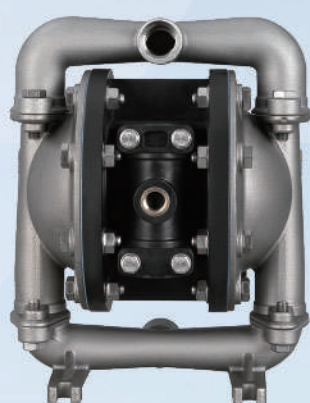
BSK Metal Pump Series
BP15 »



BP15AL Aluminum Alloy Pump

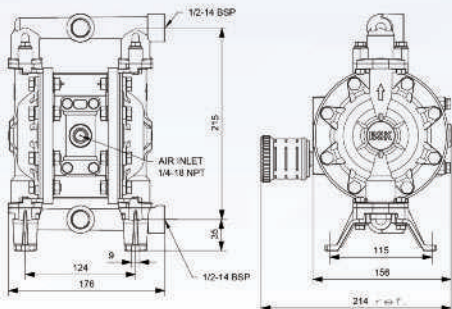


BP15CS Carbon Steel Pump



BP15SS Stainless Steel Pump

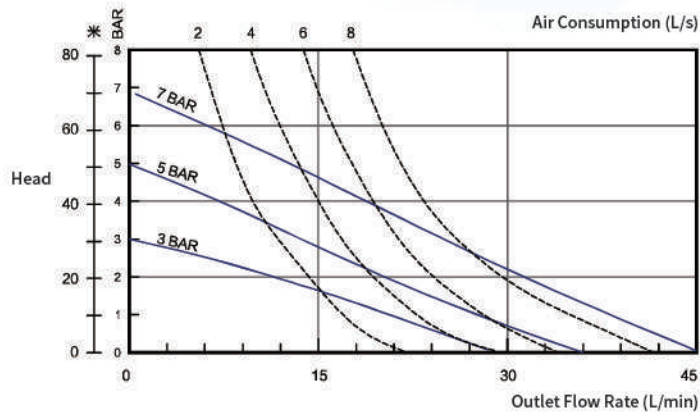
INSTALLATION DIAGRAM



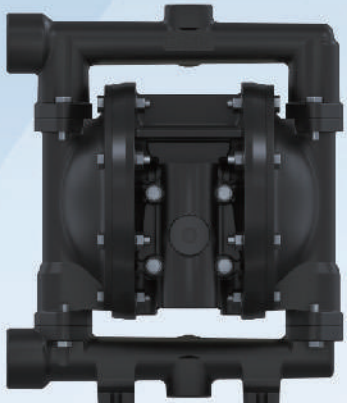
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.15-0.69 Mpa
• Maximum Fluid Output Pressure	0.69 Mpa
• Maximum Flow Rate	45.3 lpm
• Maximum Particle Size	2.5 mm
• Maximum Dry Suction Lift	3.4 m
• Noise Level @ 70 psi	75 dB
• Weight	Aluminum Alloy 3.1kg Carbon Steel 5.5kg Stainless Steel 5.5kg

PERFORMANCE CURVE



BSK Metal Pump Series
CP20 »

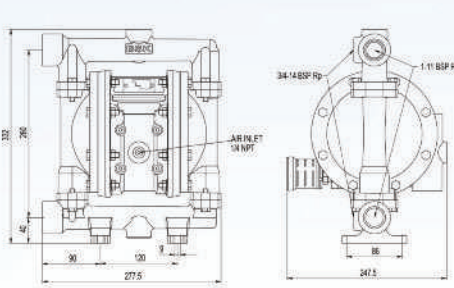


CP20AL Aluminum Alloy Pump



CP20SS Stainless Steel Pump

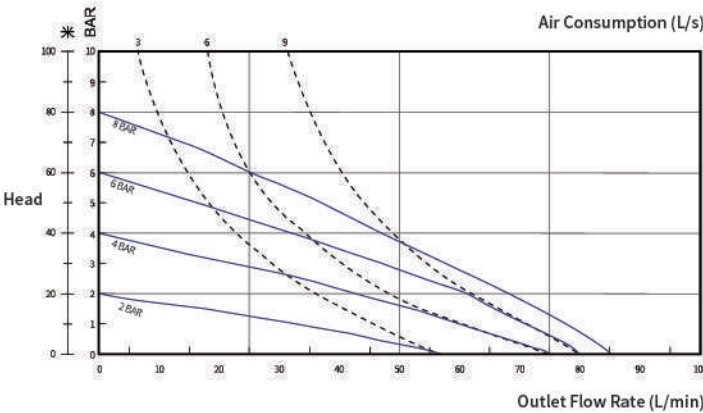
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	86 lpm
• Maximum Particle Size	3 mm
• Maximum Dry Suction Lift	4.8 m
• Noise Level @ 70 psi	78 dB
• Weight	Aluminum Alloy 6.8kg Stainless Steel 11.5kg

PERFORMANCE CURVE



BSK Metal Pump Series
BA25 >>



BA25AL Aluminum Alloy Pump

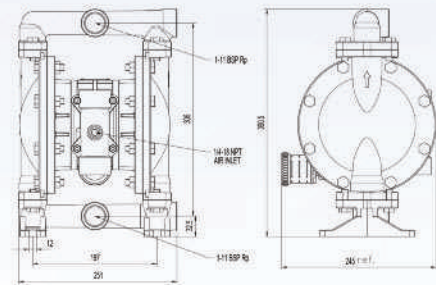


BA25CS Carbon Steel Pump



BA25SS Stainless Steel Pump

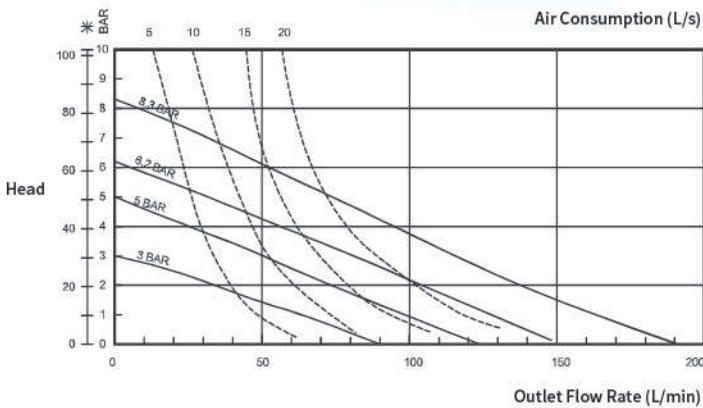
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	192 lpm
• Maximum Particle Size	3 mm
• Maximum Dry Suction Lift	6.7 m
• Noise Level @ 70 psi	75 dB
• Weight	Aluminum Alloy 9.5kg Carbon Steel 14.5kg Stainless Steel 14.5kg

PERFORMANCE CURVE



BSK Metal Pump Series
BA40 >>



BA40AL Aluminum Alloy Pump

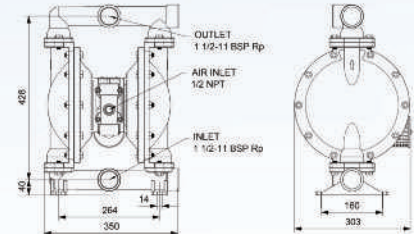


BA40CI Cast Iron Pump



BA40SS Stainless Steel Pump

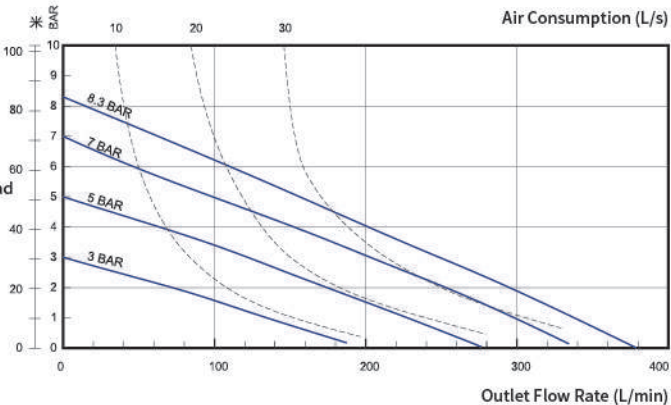
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	378.5 lpm
• Maximum Particle Size	6 mm
• Maximum Dry Suction Lift	6.7 m
• Noise Level @ 70 psi	75 dB
• Weight	Aluminum Alloy 18kg Cast Iron 30kg Stainless Steel 30kg

PERFORMANCE CURVE



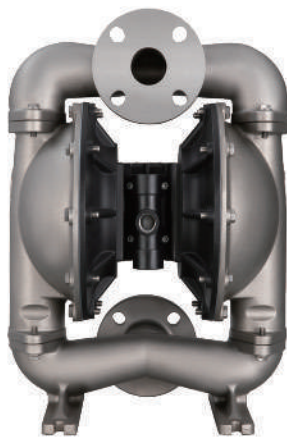
BSK Metal Pump Series
BA50 »



BA50AL Aluminum Alloy Pump

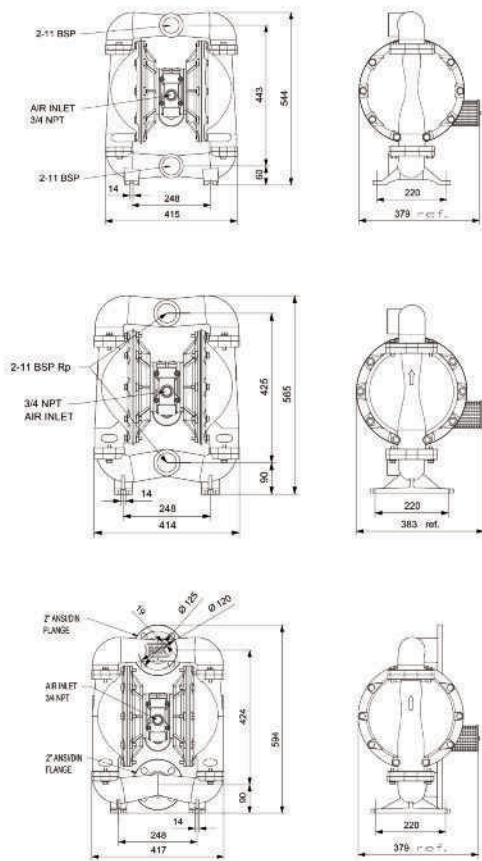


BA50CI Cast Iron Pump



BA50SS Stainless Steel Pump

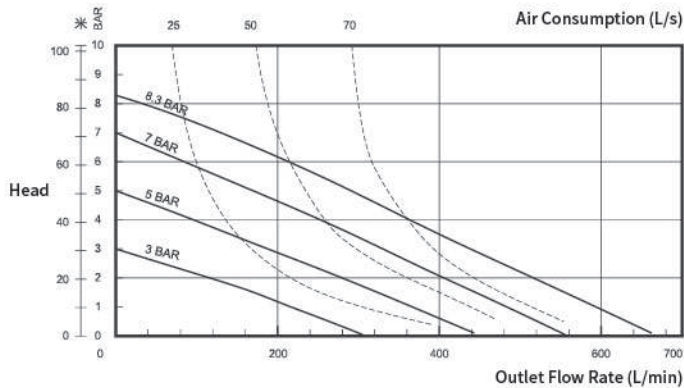
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	667 lpm
• Maximum Particle Size	7 mm
• Maximum Dry Suction Lift	6.2 m
• Noise Level @ 70 psi	75 dB
• Weight	Stainless Steel 53kg Cast Iron 48.5kg Aluminum Alloy 24.5kg

PERFORMANCE CURVE



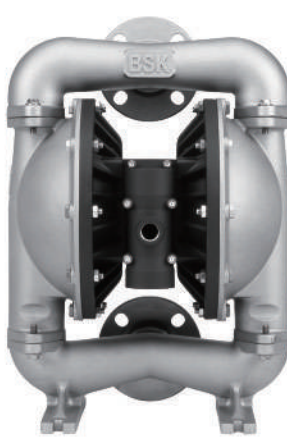
BSK Metal Pump Series
CA50 »



CA50AL Aluminum Alloy Pump

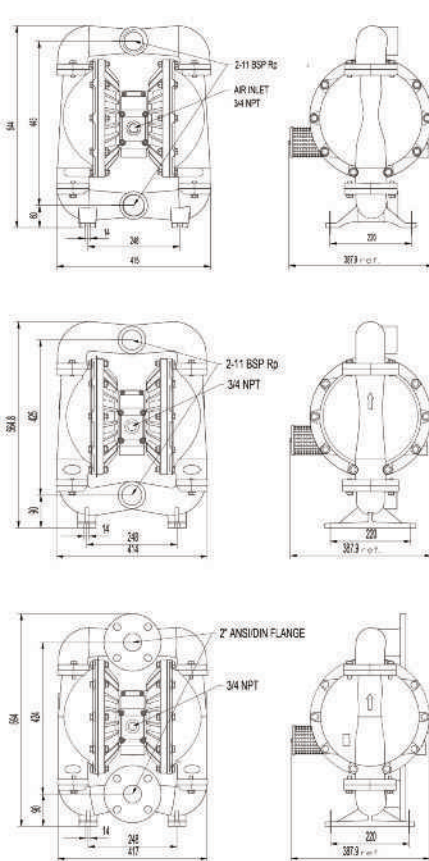


CA50CI Cast Iron Pump



CA50SS Stainless Steel Pump

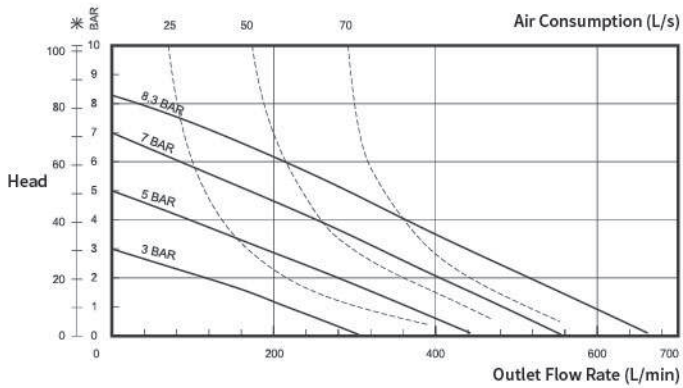
INSTALLATION DIAGRAM



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• Maximum Flow Rate	667 lpm
• Maximum Particle Size	7 mm
• Maximum Dry Suction Lift	6.2 m
• Noise Level @ 70 psi	75 dB
• Weight	Stainless Steel 53kg Cast Iron 48.5kg Aluminum Alloy 24.5kg

PERFORMANCE CURVE



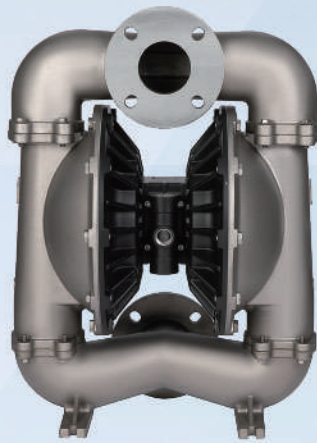
BSK Metal Pump Series
BA80 >>



BA80AL Aluminum Alloy Pump

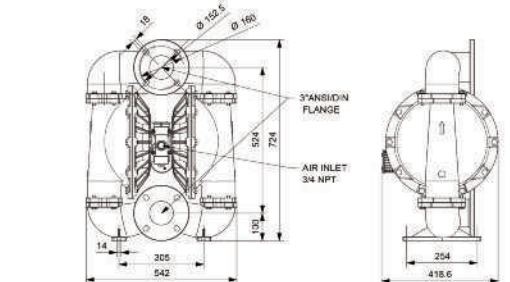
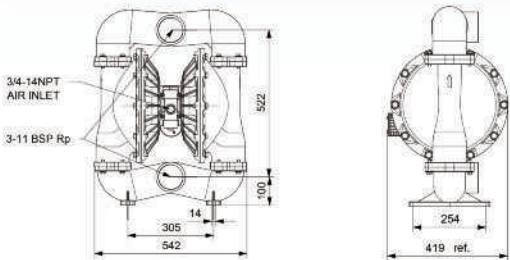
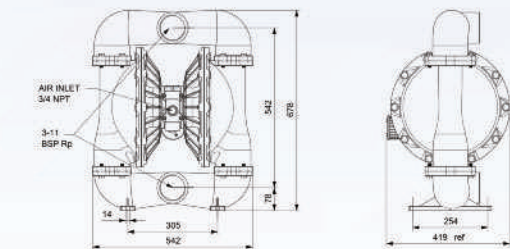


BA80CI Cast Iron Pump



BA80SS Stainless Steel Pump

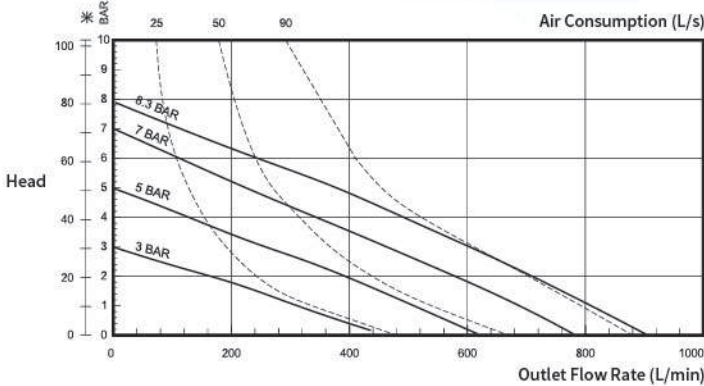
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	903 lpm
• Maximum Particle Size	9 mm
• Maximum Dry Suction Lift	5.3 m
• Noise Level @ 70 psi	75 dB
• Weight	Stainless Steel 95kg Cast Iron 91kg Aluminum Alloy 42kg

PERFORMANCE CURVE



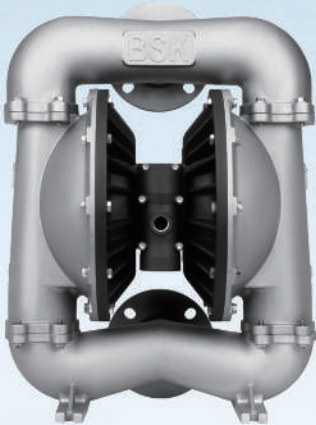
BSK Metal Pump Series
CA80 >>



CA80AL Aluminum Alloy Pump

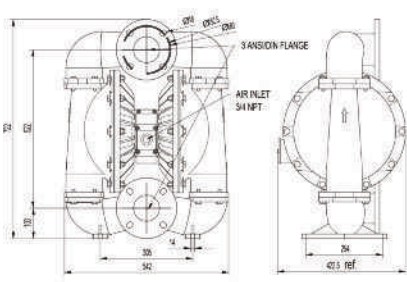
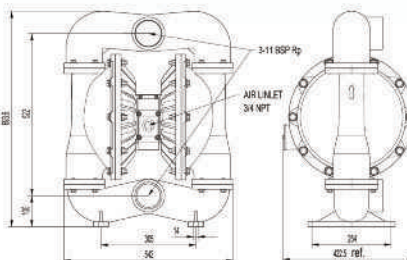
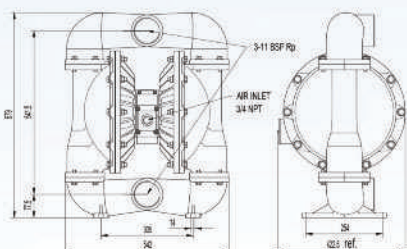


CA80CI Cast Iron Pump



CA80SS Stainless Steel Pump

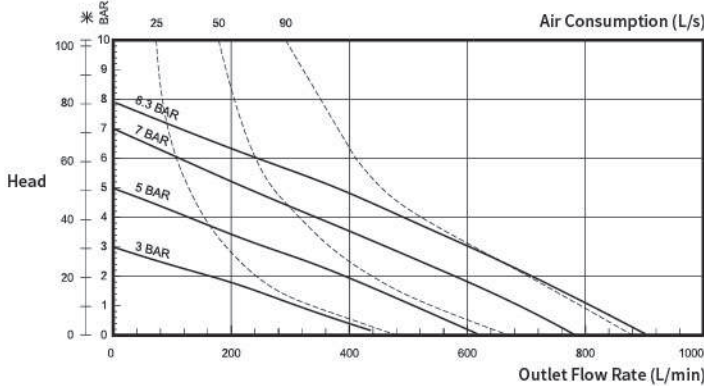
INSTALLATION DIAGRAM



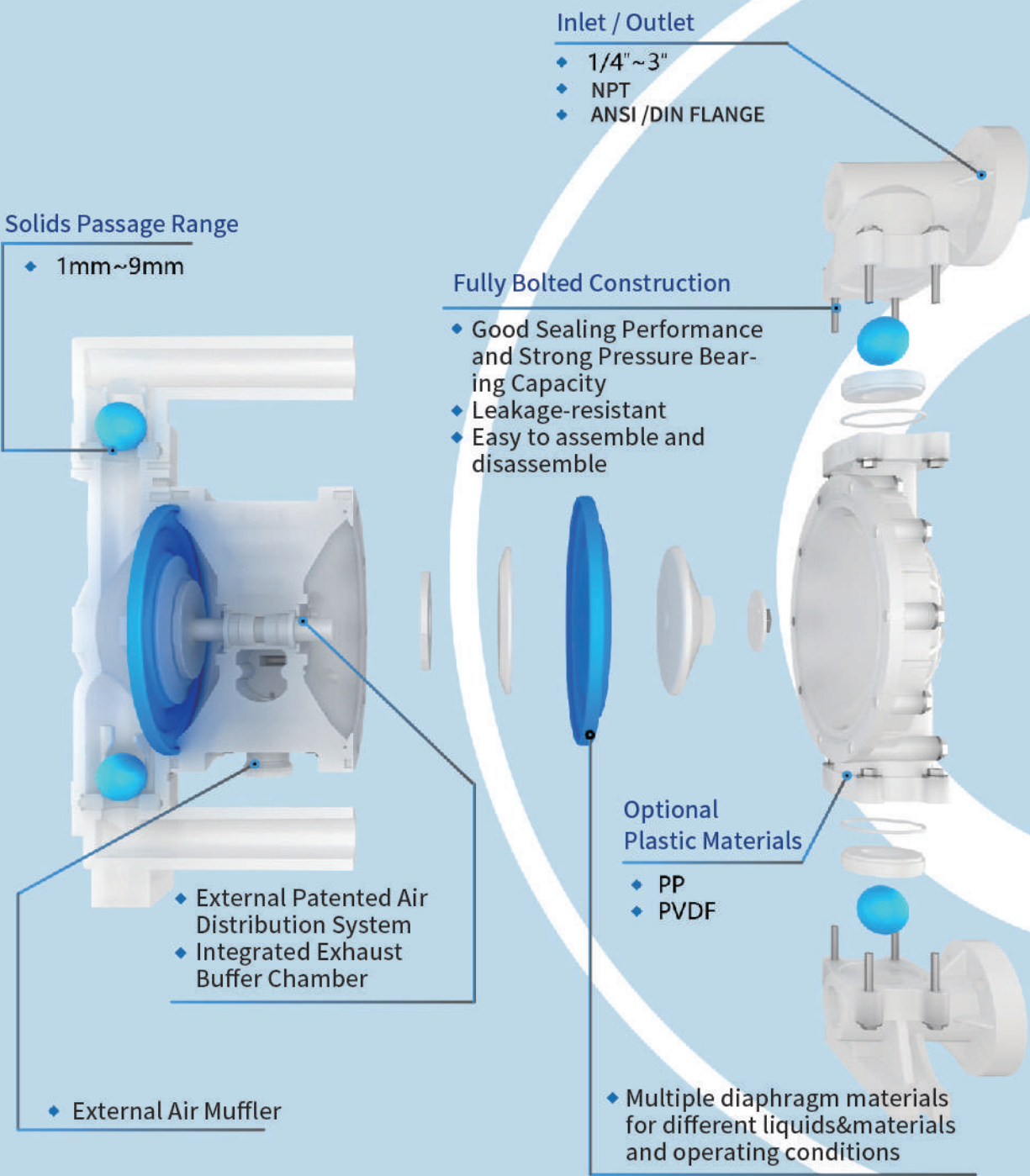
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• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	903 lpm
• Maximum Particle Size	9 mm
• Maximum Dry Suction Lift	5.3 m
• Noise Level @ 70 psi	75 dB
• Weight	Stainless Steel 95kg Cast Iron 91kg Aluminum Alloy 42kg

PERFORMANCE CURVE



Plastic Pumps Series



Maximum Dry Suction Lift
3.4m~6.7m

Flow rate and lift head Adjustment
Flow rate and outlet pressure can be adjusted simply by regulating the air supply; maximum outlet pressure is up to 8.3 bar (120 psi).

Plastic Pump Selection Table (BP/BA/CP)

Model: BA/BP		XX	XX-	X	X	X	X-	X	(X X)
		①	②	③	④	⑤	⑥	⑦	⑧
① SIZE	② HOUSING	③ BALL SEAT	④ BALL	⑤ DIAPHRAGM	⑥ O-RING	⑦ PORT	⑧ Code for special order		
06=1/4" 15=1/2" 25=1" 40=1 1/2" 50=2" 80=3"	PP=Polypropylene PV=PVDF	P=UPE T=PTFE	9=santoprene® T=PTFE B=NBR H=Hytrek	9=santoprene® T=PTFE/santoprene H=Hytrek B=NBR V=FKM	1=NBR 2=EPDM 4=PTFE(COVER) 5=FKM	B=NPT thread C=Flange T=Middle port			

Model: CP		XX	XX-	X	X	X	X-	X	(X X)
		①	②	③	④	⑤	⑥	⑦	⑧
① SIZE	② HOUSING	③ BALL SEAT	④ BALL	⑤ DIAPHRAGM	⑥ O-RING	⑦ PORT	⑧ Code for special order		
20=3/4" 25=1" 40=1 1/2" 50=2" 80=3"	PP=Polypropylene PV=PVDF	P=UPE T=PTFE	9=santoprene® T=PTFE B=NBR H=Hytrek	9=santoprene® T=PTFE/santoprene H=Hytrek B=NBR V=FKM	1=NBR 2=EPDM 4=PTFE(COVER) 5=FKM	B=NPT thread C=Flange T=Middle port			

Plastic Pump Flow-Rate Specification Table

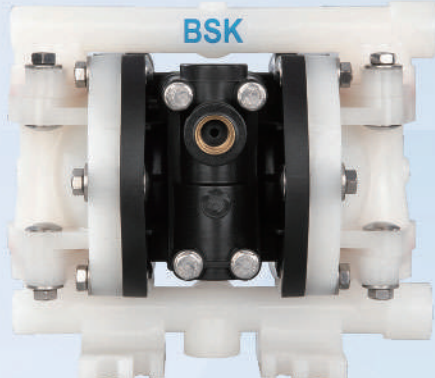
PORT SIZE	AIR INLET	FLUID INLET	FLUID OUTLET	PORT CONNECTION	MAX. DRY SUCTION LIFT	MAX. FLOW RATE
1/4"	1/4" NPT	11.5mm/0.2"	11.5mm/0.2"	NPT(Thread)	3.5 m	26 lpm
1/2"	1/4" NPT	15mm/0.5"	15mm/0.5"	NPT(Thread)	3.4 m	45 lpm
3/4"	1/4" NPT	20mm/0.75"	20mm/0.75"	NPT(Thread) ANSI/DIN(Flange)	4.8 m	86 lpm
1"	1/4" NPT	30mm/1"	30mm/1"	ANSI/DIN(Flange)	6.7 m	192 lpm
1.5"	1/2" NPT	45mm/1.5"	45mm/1.5"	ANSI/DIN(Flange)	6.7 m	378 lpm
2"	3/4" NPT	50mm/2"	50mm/2"	ANSI/DIN(Flange)	6.2 m	667 lpm
3"	3/4" NPT	81mm/3"	81 mm/3"	ANSI/DIN(Flange)	5.3 m	903 lpm

PORT SIZE	MAX. WORKING PRESSURE	MAX. PARTICLE SIZE	DISPLACEMENT PER STROKE	PUMP BODY MATERIAL	MAX. OPERATING TEMPERATURE
1/4"	6.0 Bar	1 mm	0.06 L	PP / PVDF	PP(79°C) PVDF(93°C)
1/2"	6.9 Bar	2.5 mm	0.14 L	PP / PVDF	PP(79°C) PVDF(93°C)
3/4"	8.3 Bar	3 mm	0.45 L	PP / PVDF	PP(79°C) PVDF(93°C)
1"	8.3 Bar	3 mm	0.87 L	PP / PVDF	PP(79°C) PVDF(93°C)
1.5"	8.3 Bar	6 mm	2.83 L	PP / PVDF	PP(79°C) PVDF(93°C)
2"	8.3 Bar	7 mm	3.78 L	PP / PVDF	PP(79°C) PVDF(93°C)
3"	8.3 Bar	9 mm	7.67 L	PP	PP(79°C / 175°F)

BSK Plastic Pump Series
BP06 »

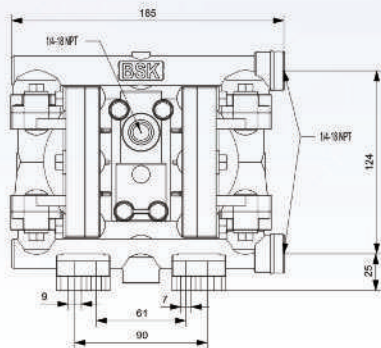


BP06PP Plastic Pump



BP06PV Plastic Pump

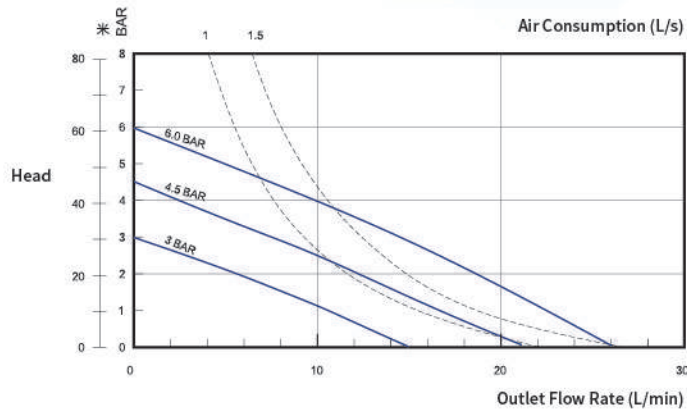
INSTALLATION DIAGRAM



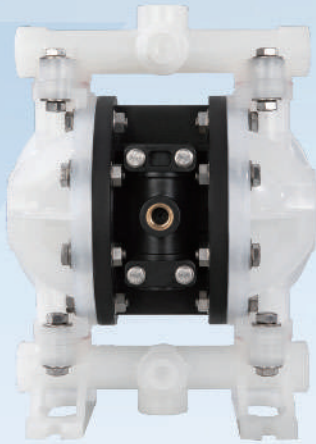
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.09-0.60 Mpa
• Maximum Fluid Output Pressure	0.60 Mpa
• Maximum Flow Rate	26.1 lpm
• Maximum Particle Size	1 mm
• Maximum Dry Suction Lift	3.5 m
• Noise Level @ 70 psi	68 dB
• Weight	Polypropylene 1.3kg PVDF 1.8kg

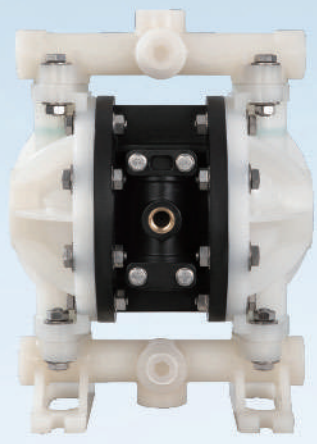
PERFORMANCE CURVE



BSK Plastic Pump Series
BP15 »

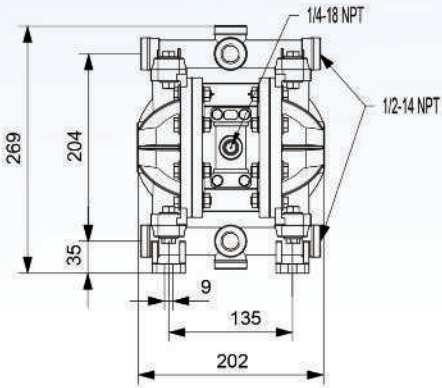


BP15PP Plastic Pump



BP15PV Plastic Pump

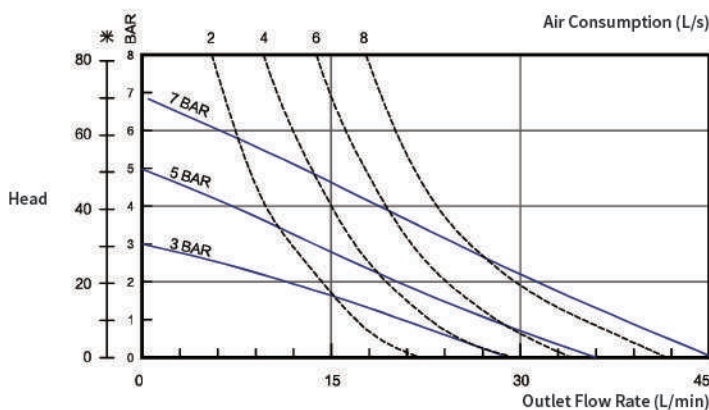
INSTALLATION DIAGRAM



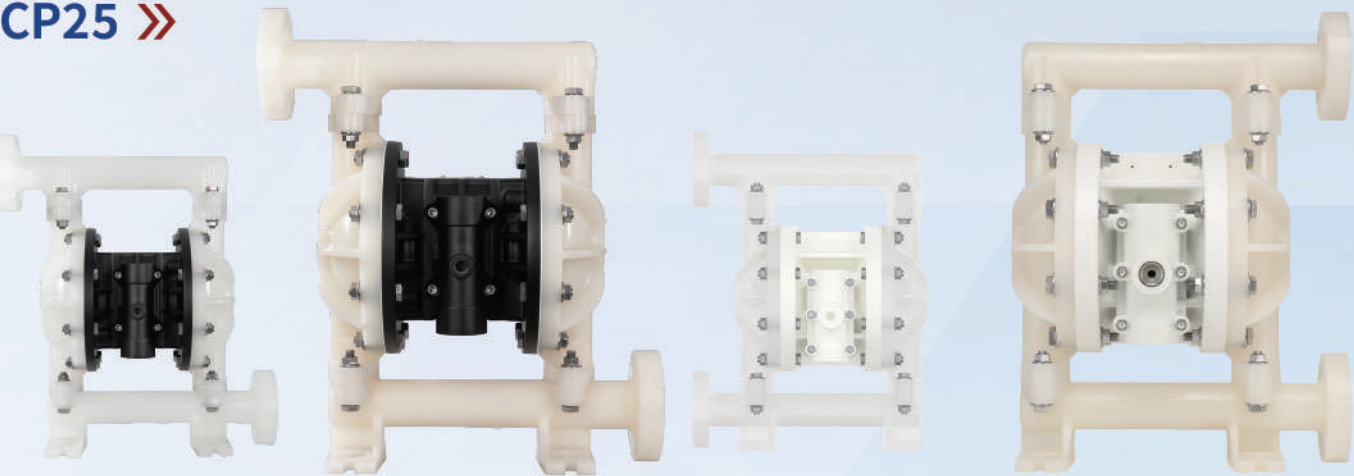
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.15-0.69 Mpa
• Maximum Fluid Output Pressure	0.69 Mpa
• Maximum Flow Rate	45.3 lpm
• Maximum Particle Size	2.5 mm
• Maximum Dry Suction Lift	3.4 m
• Noise Level @ 70 psi	75 dB
• Weight	Polypropylene 2.4kg PVDF 3.5kg

PERFORMANCE CURVE

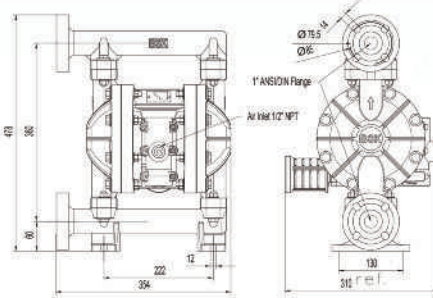
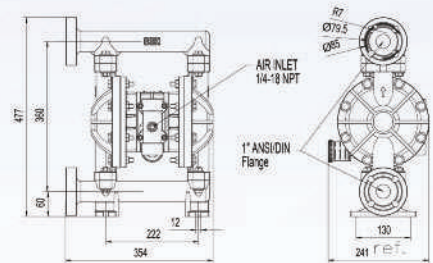


BSK Plastic Pump Series
BA25
CP25 »



BA25PP Plastic Pump BA25PV Plastic Pump CP25PP Plastic Pump CP25PV Plastic Pump

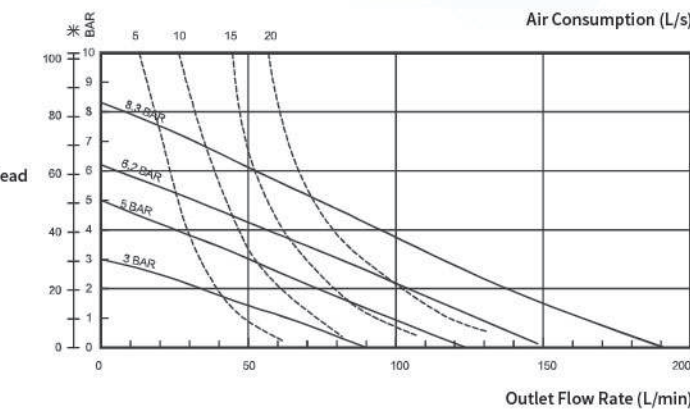
INSTALLATION DIAGRAM



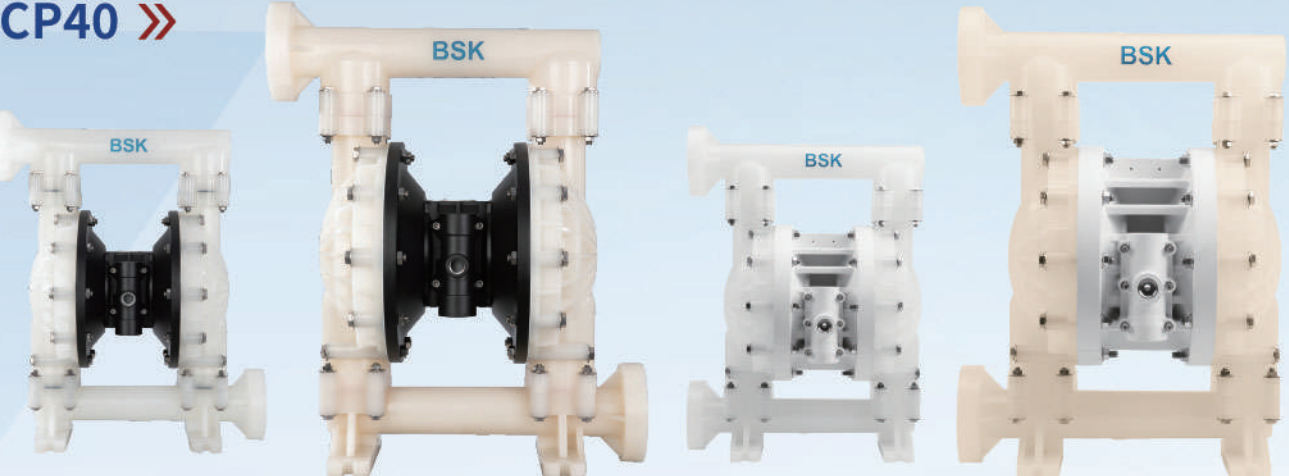
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	192 lpm
• Maximum Particle Size	3 mm
• Maximum Dry Suction Lift	6.7 m
• Noise Level @ 70 psi	75 dB
• Weight	Polypropylene 9.5kg PVDF 12.5kg

PERFORMANCE CURVE

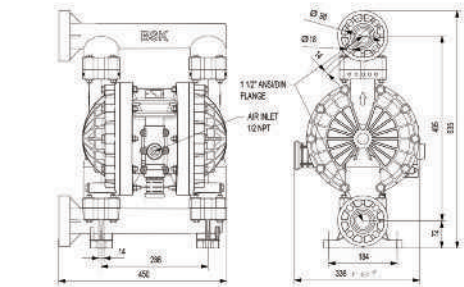
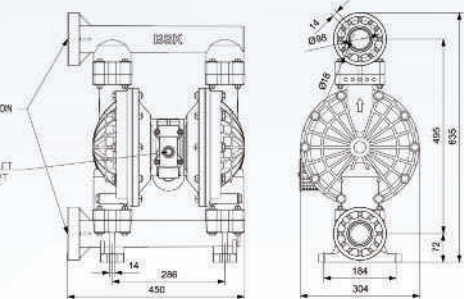


BSK Plastic Pump Series
BA40
CP40 »



BA40PP Plastic Pump BA40PV Plastic Pump CP40PP Plastic Pump CP40PV Plastic Pump

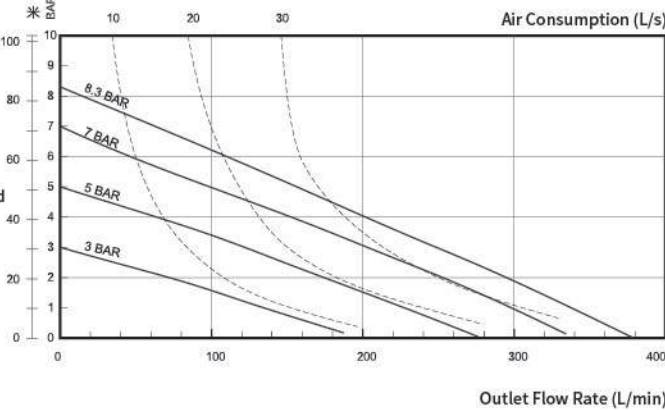
INSTALLATION DIAGRAM



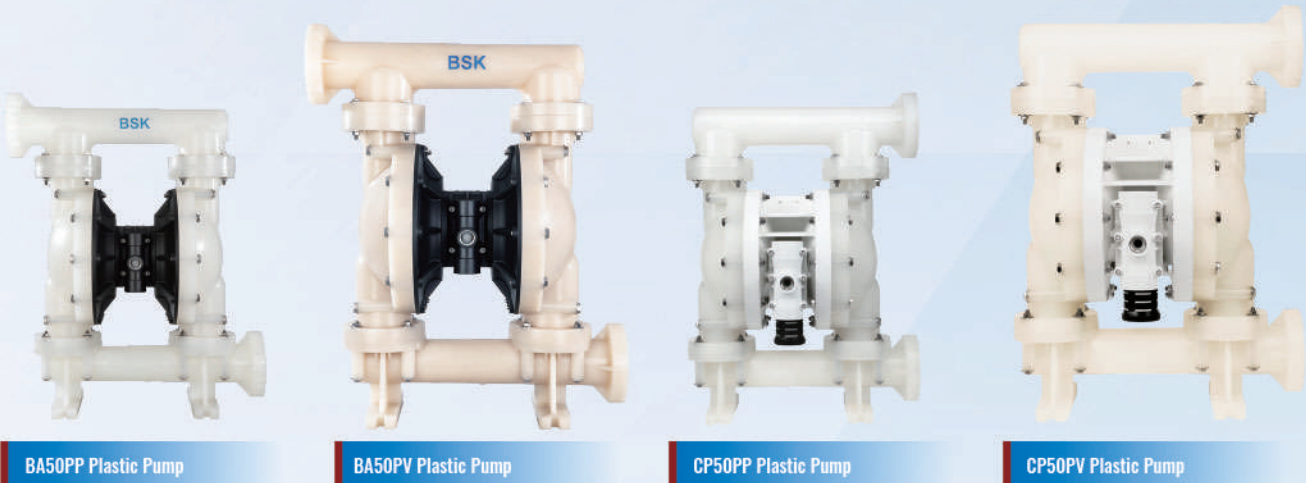
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	378.5 lpm
• Maximum Particle Size	6 mm
• Maximum Dry Suction Lift	6.7 m
• Noise Level @ 70 psi	75 dB
• Weight	Polypropylene 19kg PVDF 28kg

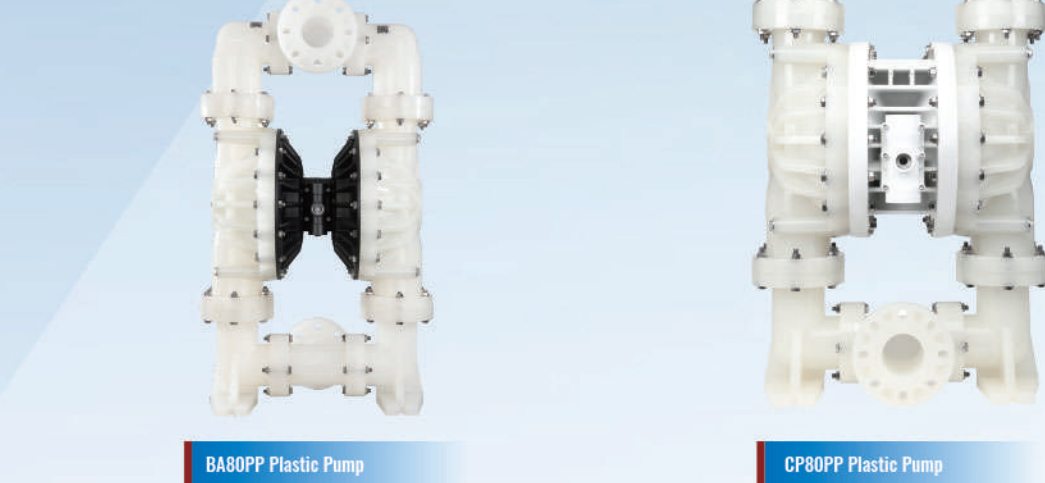
PERFORMANCE CURVE



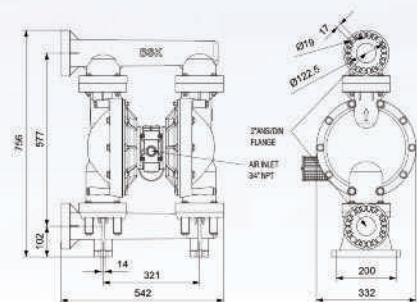
BSK Plastic Pump Series
BA50
CP50 »



BSK Plastic Pump Series
BA80
CP80 »



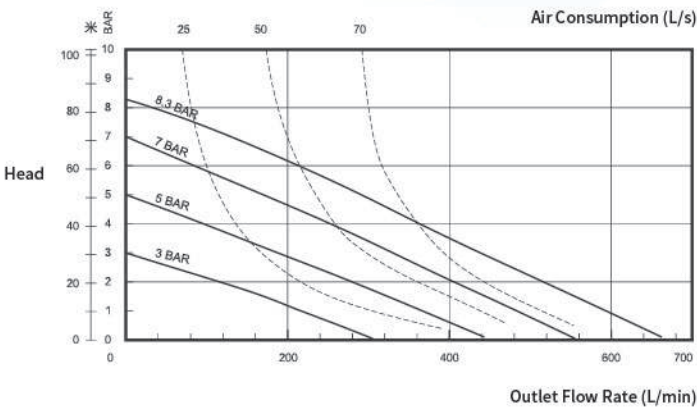
INSTALLATION DIAGRAM



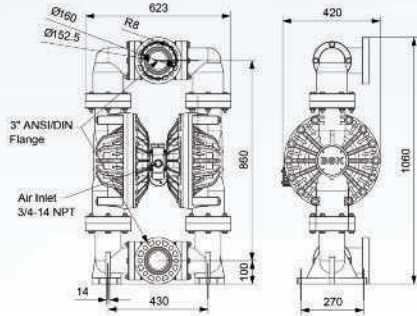
TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	667 lpm
• Maximum Particle Size	7 mm
• Maximum Dry Suction Lift	6.2 m
• Noise Level @ 70 psi	75 dB
• Weight	Polypropylene 26kg PVDF 39kg

PERFORMANCE CURVE



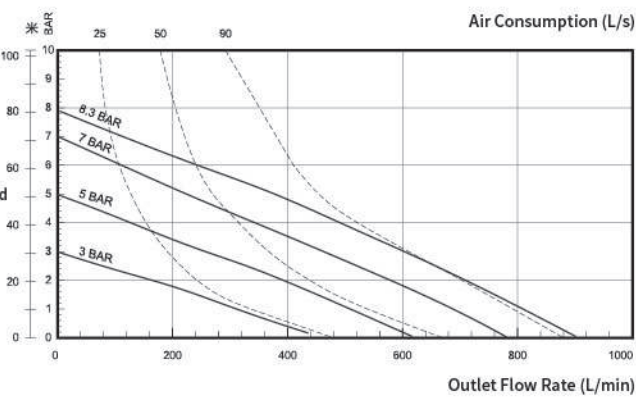
INSTALLATION DIAGRAM



TECHNICAL SPECIFICATIONS

• Air Inlet Pressure Range	0.10-0.83 Mpa
• Maximum Fluid Output Pressure	0.83 Mpa
• Maximum Flow Rate	903 lpm
• Maximum Particle Size	9 mm
• Maximum Dry Suction Lift	5.3 m
• Noise Level @ 70 psi	75 dB
• Weight	Polypropylene 54kg

PERFORMANCE CURVE



Mining Pump Series »

Technical Advantages



Patented dual-ceramic plate-valve air-motor design featuring high tolerance for contaminated compressed-air supplies



Modular design featuring the industry's lowest component count, facilitating easy and economical maintenance.



Highly interchangeable air-motor parts enable a single air-motor service kit to maintain the full range of BQG diaphragm pump



The proprietary air-chamber design reduces compressed-air consumption by 10% to 20%.



The double-anechoic chamber structure design effectively reduces noise and prevents the muffler from icing.



Mining Product Safety Mark Certificates



Solutions

As a professional diaphragm pump supplier, BSK is committed to product research and development, manufacturing, and performance enhancement. Its product portfolio delivers safe and reliable fluid transfer solutions to the coal-mining industry.

Drainage at the excavation face Sectional underground-roadway drainage
Drainage at the working face underground-roadway whitewashing
Drainage in the return airway underground wastewater drainage (including sludge)



Features of Mining Air-Operated Diaphragm Pumps



Safety

Powered by compressed air; produces no electrical sparks
Generates no heat during operation and is suitable for flammable or explosive gas environments
Can transfer slurries containing solids and having a certain viscosity
Can run dry



Reliability

Proven, efficient air-distribution system
High-strength structural design with good sealing, pressure resistance and suction lift



High Efficiency

Split center-section and air-valve structure for easy maintenance and servicing
Saves 10%-20% in compressed-air consumption



Portability

Among the lightest in the industry and easy to move



High Pressure Pump Applications»



Increased Flow
Doubled Pressure



Unique Structure
Leading Core Technology



Proven and Reliable
Rugged and Durable

Pressure Ratio 2:1

High Head: 140 m

Two-in-One

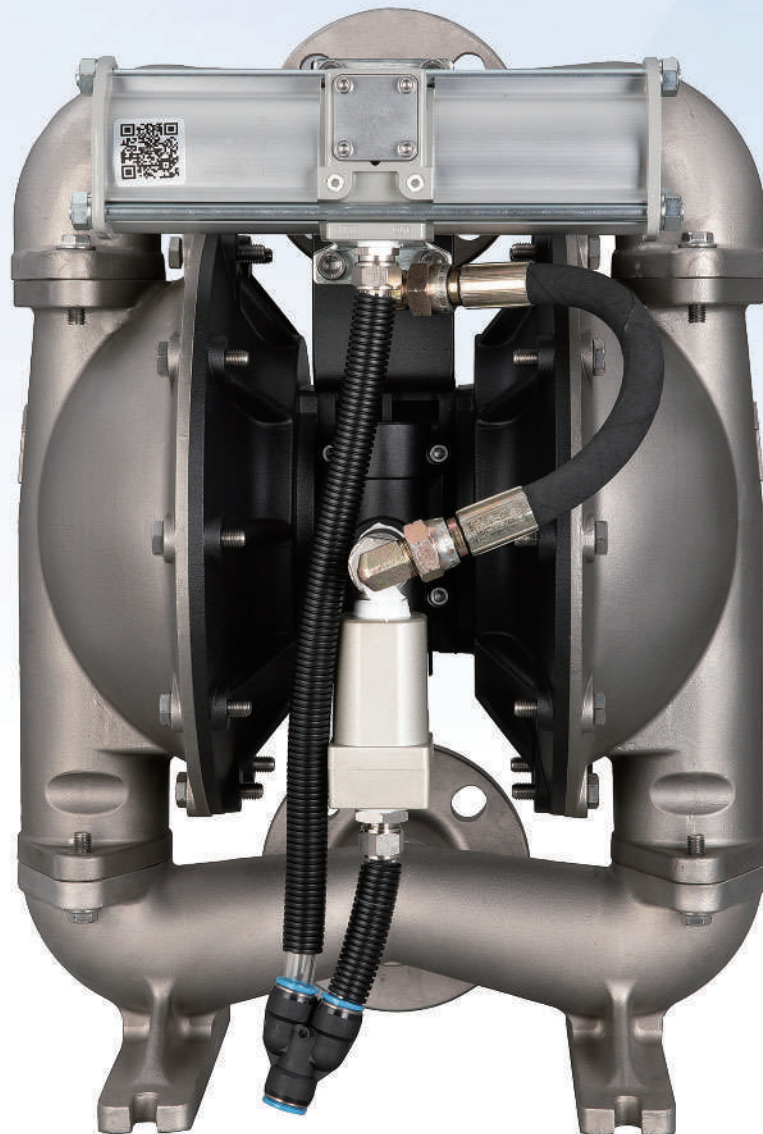
Intelligent regulation
energy saving
high flow rate

Explosion-Proof
Diaphragm Technology

Pressure balanced,
with no shear force

Unique, Leading
Air-Driven Design

Multiple Materials,
Full Product Range



Food and Pharmaceuticals



Environmental Protection



Ceramics

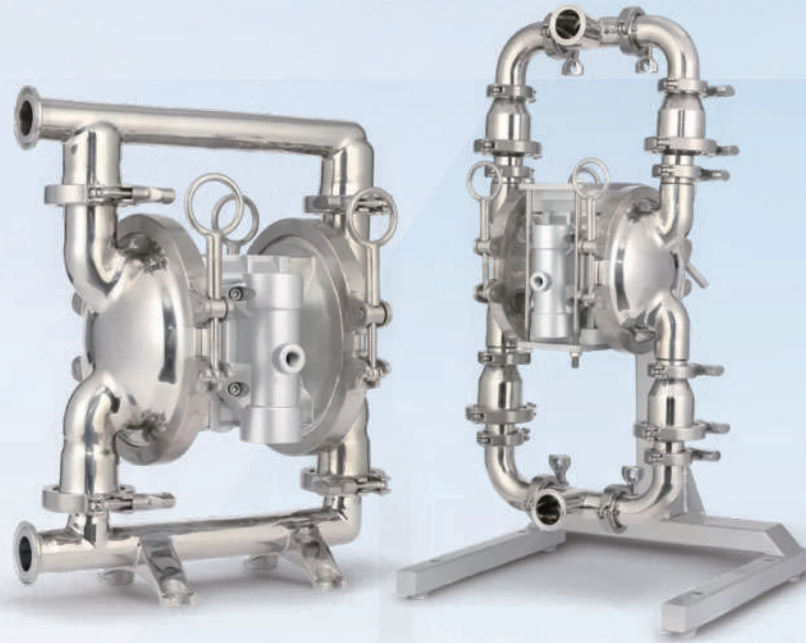


Tailings

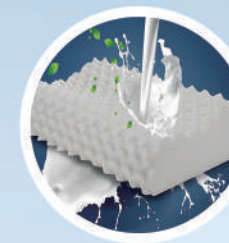


Sanitary Diaphragm Pump Series »

As a global leading brand of air-operated diaphragm pumps for sanitary and biopharmaceutical applications, BSK provides a wide range of solutions for food, beverage, dairy and personal-care applications. These include the 3A-compliant FS Series and FDA-certified FD Series. Proven in the market and refined through multiple technical innovations, the products meet or exceed the industry's highest standards and technical requirements. The BSK sanitary diaphragm-pump series delivers the versatility, safety and efficiency users require. It can transfer a range of viscous, solids-containing and shear-sensitive materials. All stainless-steel pump-body components are passivated. The full series is available in multiple sizes and with different surface-polish finishes. BSK sanitary diaphragm pumps use clamp connections for easy assembly and disassembly and support Clean-in-Place (CIP) and Clean-Out-of-Place (COP).



Sanitary Diaphragm Pump Applications »



Emerging Health and Safety Markets

- CBD Oil Production
- Disinfectants
- Latex Gloves



Food and Beverage

- Mexican Hot Sauce
- Edible Oil
- Chilli Sauce
- Chocolate
- Soy Sauce
- Salad Dressing
- Beer
- Soy Sauce and Wine
- Mayonnaise
- Juice Flavourings
- Concentrates
- Ketchup
- Corn Oil
- Syrup



Pharmaceuticals

- Chemicals
- Alcohol
- Deionised Water
- Acids



Dairy Products

- Yoghurt
- Ice Cream
- Milk
- Butter
- Eggs
- Coffee Creamer



Personal Care

- Hair Gel
- Soap
- Perfume
- Face Cream
- Lotion
- Cosmetics
- Preservatives
- Hair Dye
- Shampoo



Meat and Poultry Processing

- Heparin
- Vaccines
- Animal Blood



Powder Pump Series »



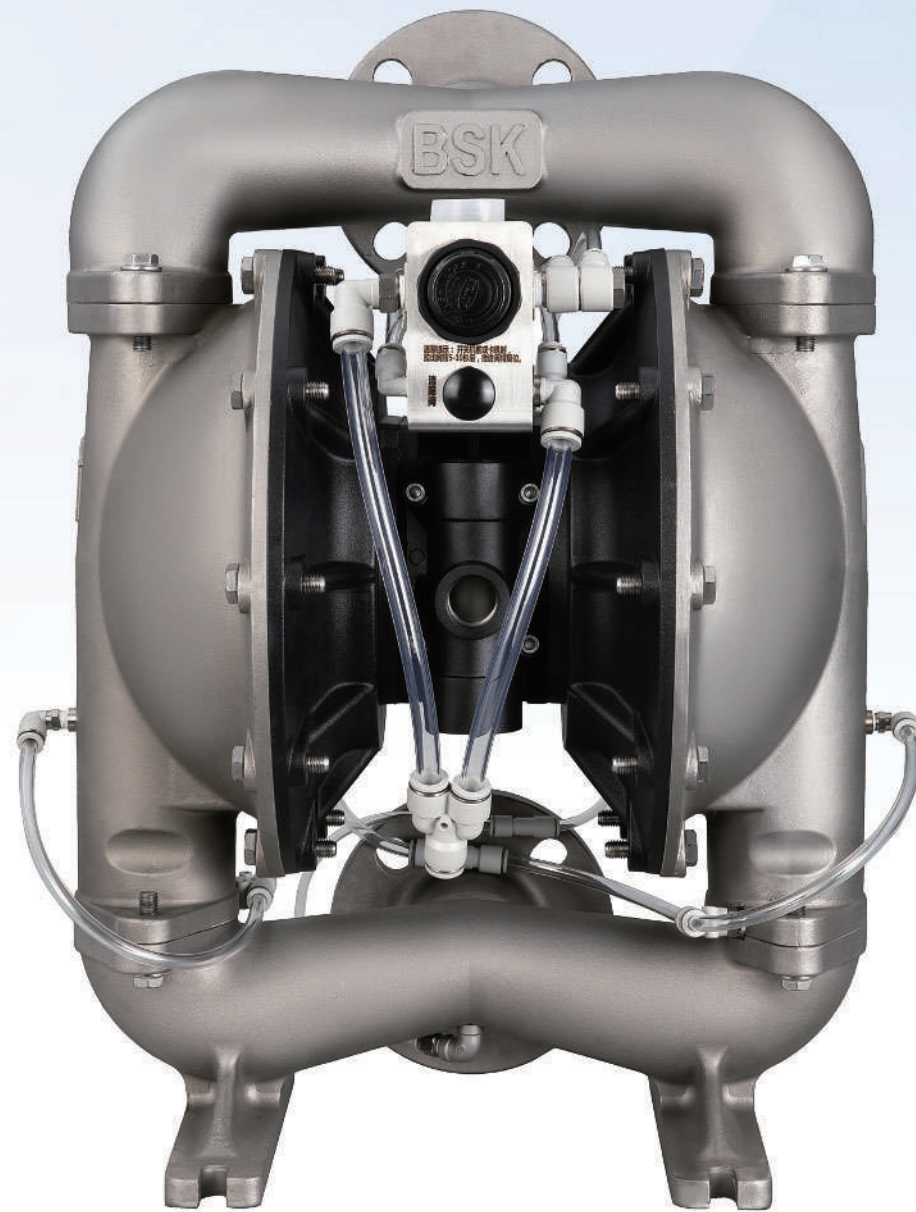
One-Touch Recovery
Simple and Easy to Operate



High Energy Efficiency
As low as RMB 0.8 per tonne of powder



High Bulk Density
Up to 1,200 kg/m³



Lithium
iron carbonate
Ternary materials
Graphite
Carbon fiber



Nanomaterials

Starch
Protein powder
Fish meal
Additives



Food and Pharmaceuticals



BSK
APPLICATIONS



Fine Chemicals

Sodium sulfate
Sodium bicarbonate
Calcium carbonate
Titanium dioxide



Semiconductors

Silicon carbide
Silicon powder
Fluoresin
Aluminum fluoride

Disc-Valve Pumps and Custom Configurations (Straight-Pipe, Vertical / Tubular Designs) »



Wetted Materials »



Special Housing Material Description for Plastic Pumps

A specified proportion of conductive material is incorporated into polypropylene (PP) or polyvinylidene fluoride (PVDF) to enhance the material's overall electrical conductivity. This approach preserves the inherent properties of the plastic while imparting metal-like conductivity.

- + Medium tensile strength and flexural strength
- + Resistant to strong acids or alkalis
- + Susceptible to attack by chlorine, fuming nitric acid, and other strong oxidizing agents
- + Conductive PP and conductive PVDF available
- + Chemical resistance is the same as that of PP and PVDF
- + High reliability and good temperature compatibility
- + Suitable for the electronics, semiconductor, pharmaceutical and chemical industries

Material Description – Housing

		TEMP ↑	TEMP ↓
Polypropylene	A thermoplastic polymer with moderate tensile and flexural strength. Resistant to strong acids and alkalis. Susceptible to attack by chlorine, fuming nitric acid and other strong oxidizing agents.	175°F 79°C	35°F 2°C
PVDF	A durable fluoroplastic with excellent chemical resistance. It is an excellent choice for UV applications and offers high tensile strength and impact resistance.	200°F 93°C	10°F -12°C
Stainless steel	Meets or exceeds ASTM A743 CF-8W and is suitable for general-purpose corrosion-resistant chromium-iron, iron-chromium-nickel and nickel-base alloy castings. Commonly referred to as 316 stainless steel in the pump industry.	572°F 300°C	-40°F -40°C
Cast iron	Rigid, wear-resistant and highly vibration-damping. It resists deformation and wears slowly under normal operating conditions, reliably withstanding pump vibration and substantially extending service life.	572°F 300°C	-40°F -40°C
Aluminum alloy	Combines the general properties of aluminum with alloy-specific characteristics. It offers high strength, good castability and formability, good electrical and thermal conductivity, corrosion resistance and weldability.	572°F 300°C	-40°F -40°C

Material Description – Diaphragms / Valve Balls and Seats

Material	Chemical Compatibility and Application Characteristics	Maximum Continuous Fluid Temperature
PTFE	Excellent chemical-corrosion resistance; recommended for most strong acids, strong alkalis and highly corrosive chemical media. Offers broad media compatibility and good high-temperature stability.	104°C / 220°F*
Santoprene	Combines excellent flexibility with fatigue resistance and is suitable for high-cycle operation. Compatible with many mild chemical media.	107°C / 225°F
Hytrel®	A high-performance polyester thermoplastic elastomer with excellent flex-fatigue resistance, suitable for high-cycle operation and offering outstanding wear resistance.	93°C / 200°F
Buna-N	Excellent oil and wear resistance; recommended for petroleum-based oils, hydraulic oils and certain non-polar media.	82°C / 180°F
Viton®	Excellent high-temperature and chemical-corrosion resistance; recommended for oils, hydrocarbons and certain corrosive chemical media.	200°C / 392°F
EPDM	Excellent resistance to hot water, weathering and chemicals; recommended for acids, alkalis and water-based media.	138°C / 280°F

Installation & Connection »

