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High Purity PTFE Pump

Bellows Pump

Skylink Fluid Technology Co.,Ltd.

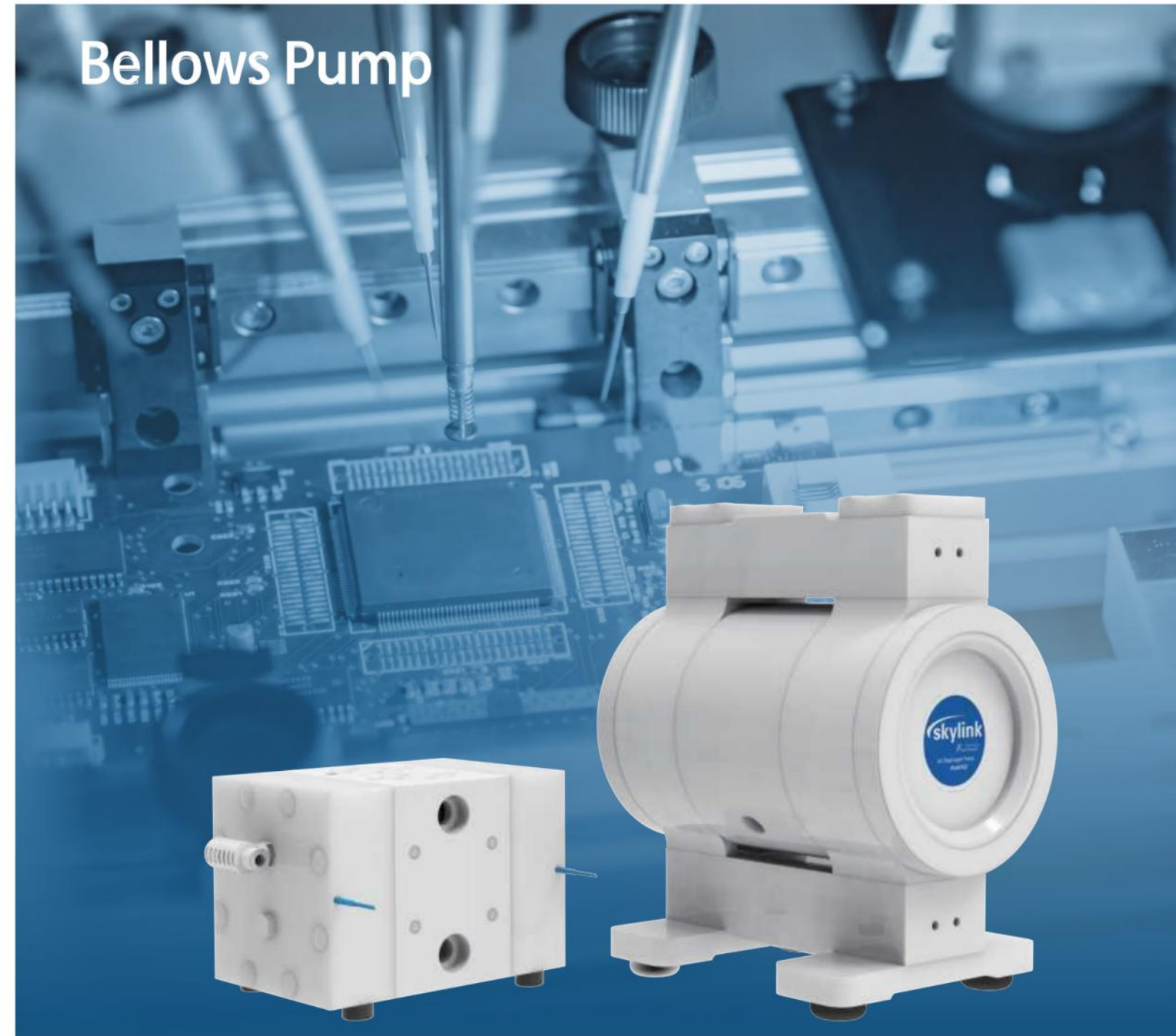
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Industry applications

SKYLINK AC-Series High Purity PTFE Pump and BFA-Series Bellows Pump is a custom-designed pneumatic pump specifically developed for the semiconductor and electronics sectors. It boasts strong corrosion resistance, durability, and high reliability, making it ideal for transferring high-purity or highly corrosive materials.

Primary applications

- Transport of chemically corrosive agents
- Electronic wastewater treatment
- Chemical recirculation in wet process systems
- Transport of acid and alkali reagents
- Grinding fluid collection
- Transport of neutralizing fluids and other acid and alkali reagents



AC-SERIES High Purity PTFE Pump

Product Features

SKYLINK AC-Series is specifically engineered for handling chemicals used in semiconductor manufacturing, with a strong emphasis on material purity. Each model in the AC-Series is designed for high-purity or corrosive environments, ensuring compatibility with the most demanding conditions. SKYLINK provides a range of high-purity PTFE pneumatic diaphragm pumps, each offering distinct levels of purity and corrosion resistance to meet diverse industry needs.

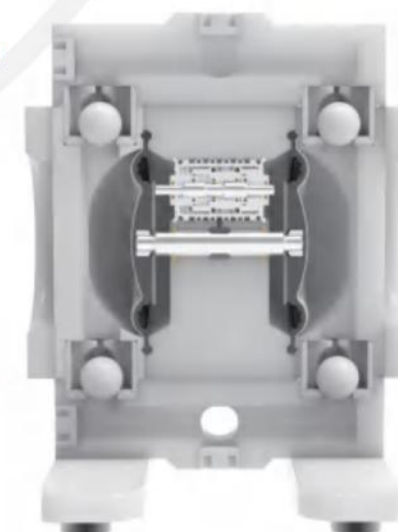
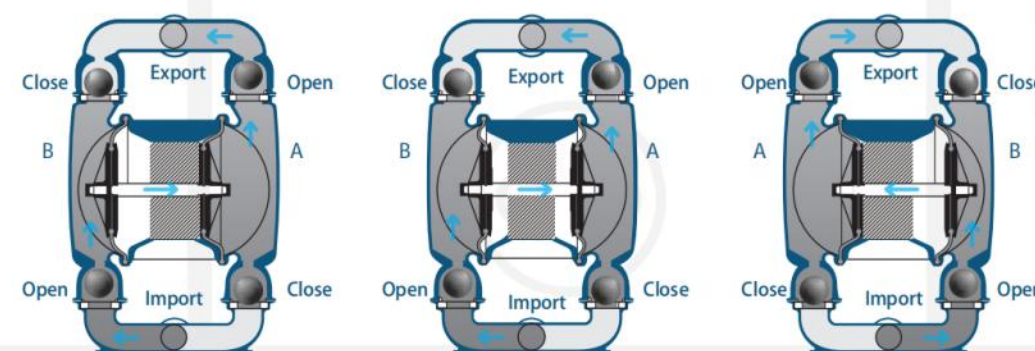
All liquid-contacting parts are manufactured from 100% pure polytetrafluoroethylene (PTFE) or ultra-high molecular weight polyethylene (UPE), with each model designed to offer

Each model is designed to provide various levels of operational performance and backup redundancy, guaranteeing long-term, uninterrupted operation.

- High-strength structural design
- Inlet and outlet material: UPE/PTFE/conductive UPE/conductive PTFE
- Diaphragm and valve ball materials: PTFE/EPDM, EPDM
- Excellent dry and wet suction capabilities
- No motors, rotating parts, or shaft seals in liquid contact areas
- Stable, safe, and reliable long-term operation
- Adhere to strict quality control standards and procedures, with production under cleanroom conditions, deionized water testing, and nitrogen purification

Operating principle

The SKELEC high-purity pneumatic diaphragm pump operates using compressed air as the power source. After the pilot valve adjusts, compressed air enters the left diaphragm chamber, driving the diaphragm to move either right or left. This movement changes the volumes of the chambers on both sides, enabling the intake and discharge of materials.



High Purity PTFE Pump exploded diagram

1 Ball valve

- Rugged and durable valve ball
- Cage-style ball valve base, linear seat sealing
- Multiple materials: PTFE/EPDM/PFA

2 Chamber

- Sturdy and reliable structure
- Streamlined flow channel design, low resistance
- Various materials: PTFE/UPE conductive PTFE/PE

3 Retaining ring

- UPE material, high strength
- The outer chamber and the intermediary are securely locked together with bolts
- Even distribution of bolt tightening force in the chamber
- The diaphragm is tightly clamped between the outer chamber and the intermediary, preventing loosening during operation.

7 Inlet and outlet

- Integral structure, high strength, easy to assemble and disassemble
- Multiple interface orientations available, facilitating on-site installation and piping

5 Integrated air valve

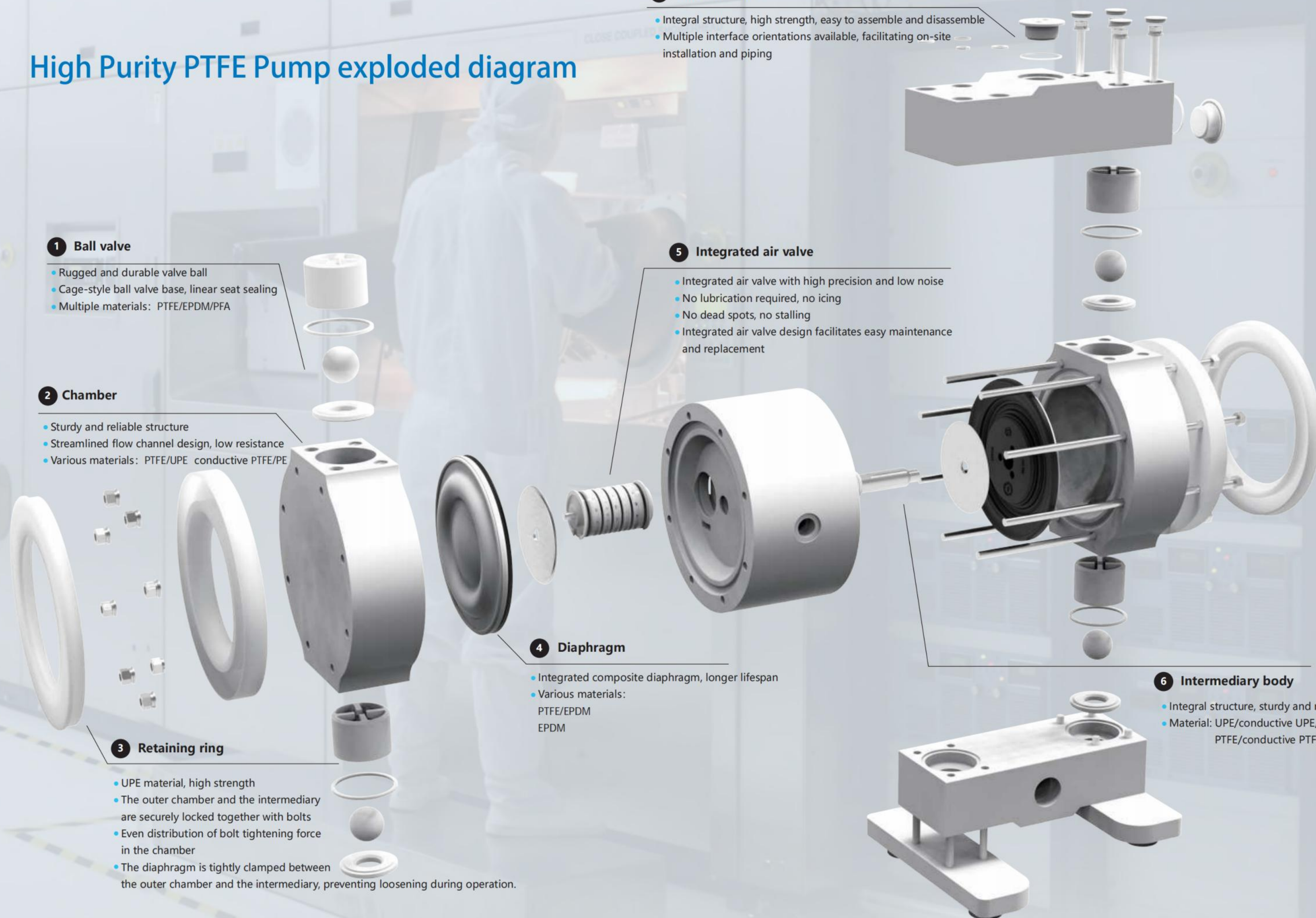
- Integrated air valve with high precision and low noise
- No lubrication required, no icing
- No dead spots, no stalling
- Integrated air valve design facilitates easy maintenance and replacement

4 Diaphragm

- Integrated composite diaphragm, longer lifespan
- Various materials: PTFE/EPDM EPDM

6 Intermediary body

- Integral structure, sturdy and reliable
- Material: UPE/conductive UPE/PTFE/conductive PTFE



AC SERIES



Model	AC	25	/	PE	PE	/	MT	T	T	/	OB0
S/N	1	2		3	4		5	6	7		8

S/N

Coding description

1 2

Grade

Diameter

AC=Electronic High Purity PTFE Pump

08=1/4" 40=1-1/2"

15=1/2" 50=2"

25=1"

3 4

Casing material

Intermediary body material

PE=UPE

PE=UPE

DE=conductive UPE

DE=conductive UPE

PT=PTFE

PA=MC Nylon

DT=conductive PTFE

PT=PTFE

DT=conductive PTFE

5 6 7

Diaphragm material

Valve ball base material

Ball valve material

MM=EPDM double-layer diaphragm

T=PTFE

T=PTFE

MT=PTFE/EPDM double-layer diaphragm

P=PFA

P=PFA

E=UPE

8

Others

OB0=BSPT Threaded

AF0=ANSI Flanged

ON0=NPT Threaded

JF0=JIS Flanged

DF0=DIN Flanged

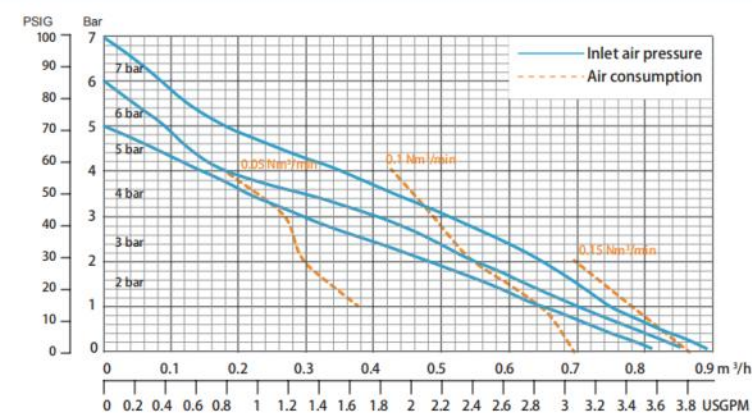
Technical specifications

Model	Maximum flow (lpm)	Inlet and outlet dimensions	Inlet size	Particle diameter (mm)	Dry suction capability(m)	Wet suction capability(m)	Displacement per stroke
AC 08	13	1/4"	1/8"	3	2	8	0.08(0.017)
AC 15	42	1/2"	1/4"	4	3.5	8.5	0.08(0.017)
AC 25	117	1"	1/2"	6	5	9	0.08(0.017)
AC 40	340	1-1/2"	3/4"	6	5	9	0.08(0.017)
AC 50	560	2"	3/4"	11	5	9	0.08(0.017)

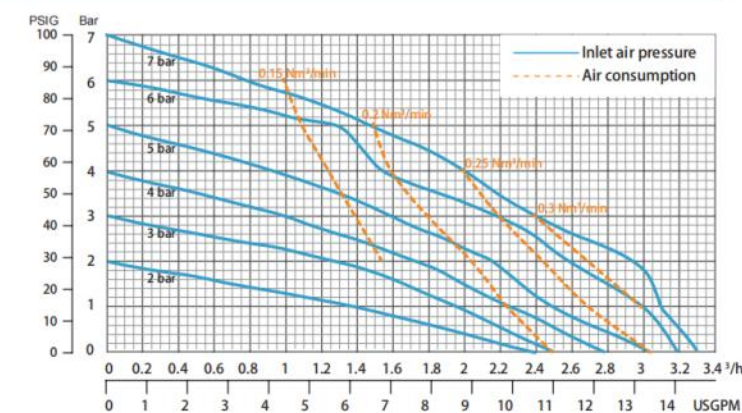
Operating pressure: 6.9Bar(100psi)

Connection methods: BSPT/NPT (Threaded) ANSI/DIN/JIS (Flanged)

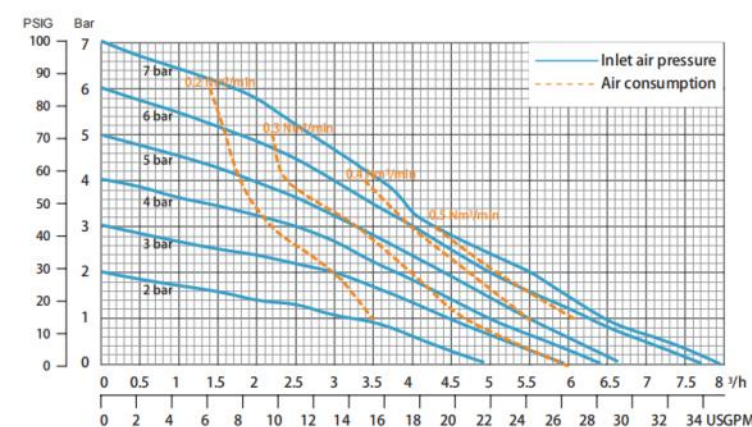
Casing temperature resistance: -30-80°C(UPE)/-37-104°C(PTFE) 、 Intermediary body temperature resistance: 0-70°C(PE/DE)/70-100°C(PA)



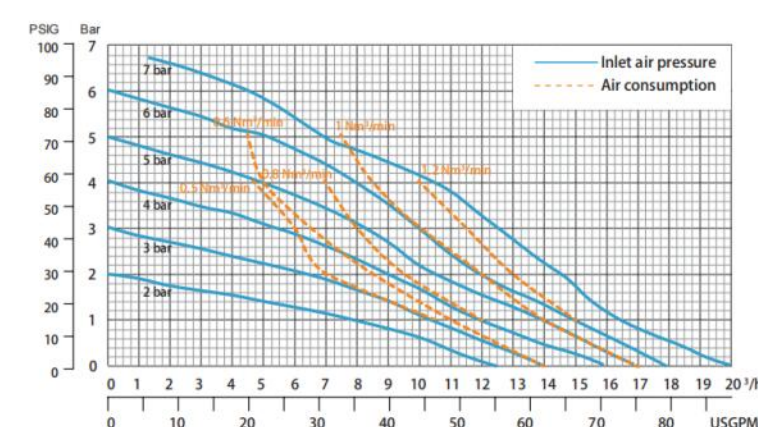
AC 08



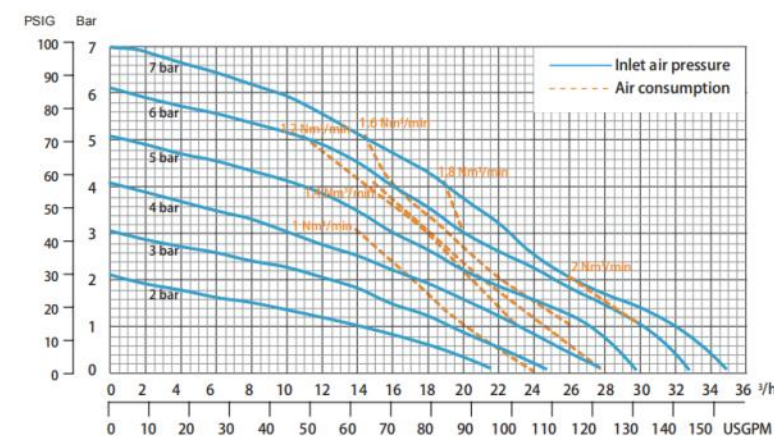
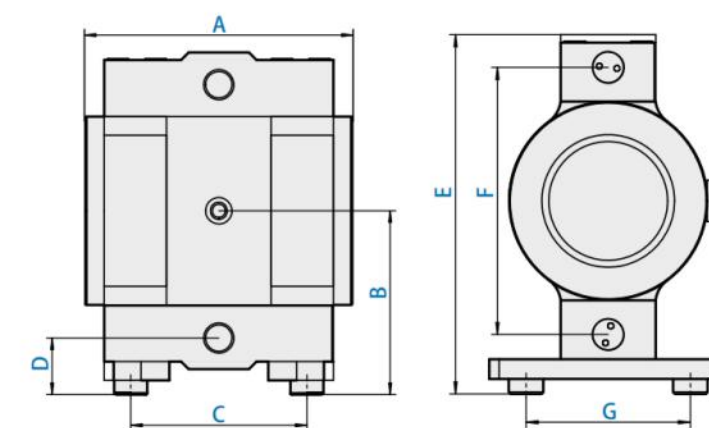
AC 15



AC 25



AC 40



AC 50

Model	A	B	C	D	E	F	G
AC 08	144	100	87	37	177	126	80
AC 15	203	154	131	54	277	200	116
AC 25	285	195	187	60	363	270	166
AC 40	430	276	260	90	521	370	230
AC 50	464	316	282	95	606	442	330



AD SERIES



Model	AD	25	/	PE	PE	/	MT	T	T	/	OB0
S/N	1	2		3	4		5	6	7		8

S/N

Coding description

1 2

Grade
AD=Non-electronic High Purity PTFE Pump

Diameter
08=1/4" 40=1-1/2"
15=1/2" 50=2"
25=1"

3 4

Casing material
PE=UPE
DE=conductive UPE
PT=PTFE
DT=conductive PTFE

Intermediary body material
PE=UPE
DE=conductive UPE
PA=MC Nylon
PT=PTFE
DT=conductive PTFE

5 6 7

Diaphragm material
MM=EPDM double-layer diaphragm
MT=PTFE/EPDM double-layer diaphragm

Valve ball base material
T=PTFE
P=PFA
E=UPE

Ball valve material
T=PTFE
P=PFA

8

Others
OB0=BSPT Threaded
ON0=NPT Threaded
DF0=DIN Flanged

AF0=ANSI Flanged
JF0=JIS Flanged

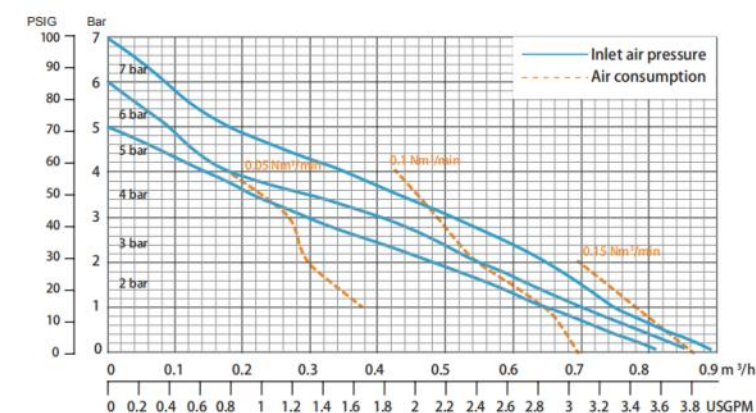
Technical specifications

Model	Maximum flow (lpm)	Inlet and outlet dimensions	Inlet size	Particle diameter (mm)	Dry suction capability(m)	Wet suction capability(m)	Displacement per stroke
AD 08	13	1/4"	1/8"	3	2	8	0.08(0.017)
AD 15	42	1/2"	1/4"	4	3.5	8.5	0.08(0.017)
AD 25	117	1"	1/2"	6	5	9	0.08(0.017)
AD 40	340	1-1/2"	3/4"	6	5	9	0.08(0.017)
AD 50	560	2"	3/4"	11	5	9	0.08(0.017)

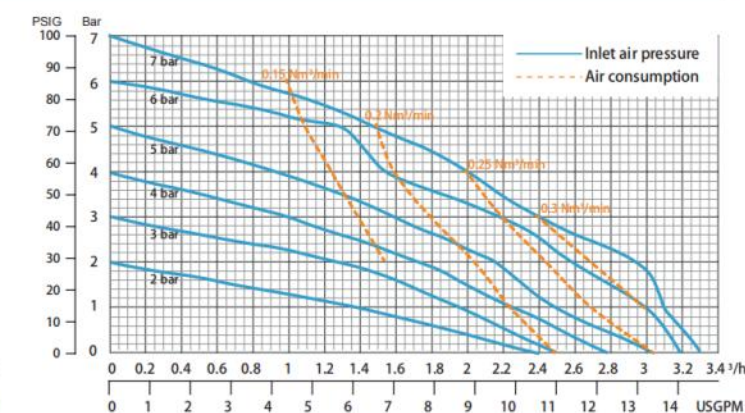
Operating pressure: 6.9Bar(100psi)

Connection methods: BSPT/NPT (Threaded) ANSI/DIN/JIS (Flanged)

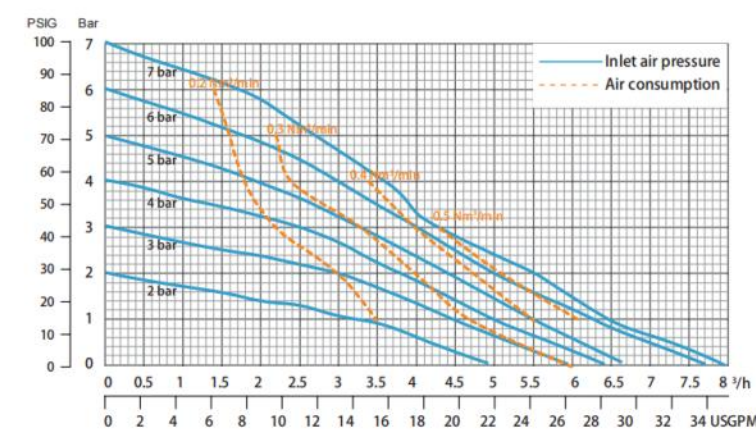
Casing temperature resistance: -30-80°C(UPE)/-37-104°C(PTFE) 、 Intermediary body temperature resistance: 0-70°C(PE/DE)/70-100°C(PA)



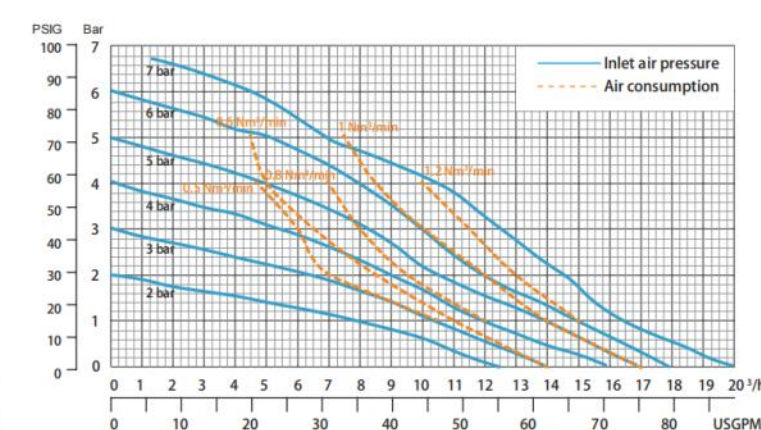
AD 08



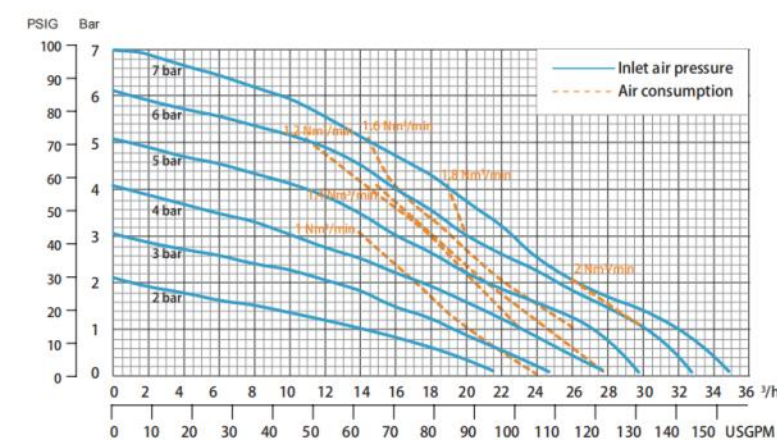
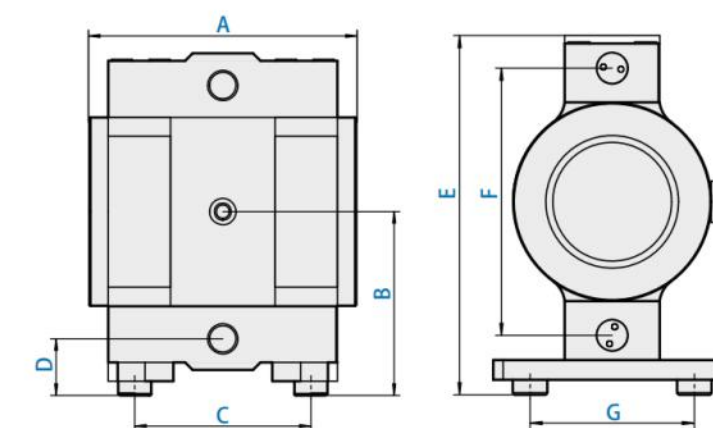
AD 15



AD 25



AD 40



AD 50

Model	A	B	C	D	E	F	G
AD 08	144	100	87	37	177	126	80
AD 15	203	154	131	54	277	200	116
AD 25	285	195	187	60	363	270	166
AD 40	430	276	260	90	521	370	230
AD 50	464	316	282	95	606	442	330



BFA-SERIES Bellows Pump

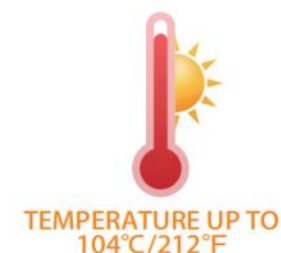
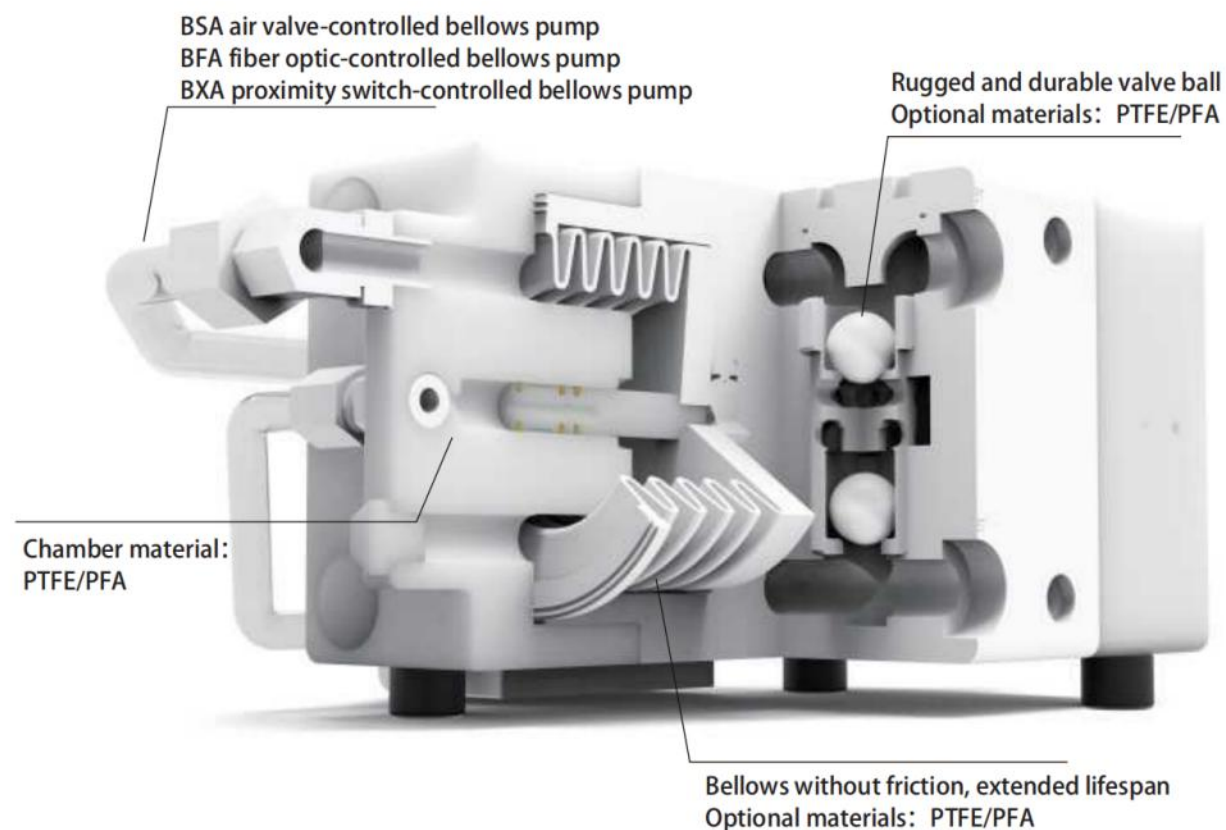
The SKELEC bellows pumps are specifically engineered for the semiconductor sector. These custom, non-metallic pneumatic bellows pumps offer truly pollution-free, reliable, and corrosion-resistant fluid transport, ensuring safe and efficient operations.

Utilizing high-purity PTFE and PFA materials in the fluid path, these pumps are free from metals, rubber O-rings, impellers, or motors. The streamlined and reliable design uses minimal components, allowing continuous operation throughout the warranty period and supporting various application scenarios with different series.

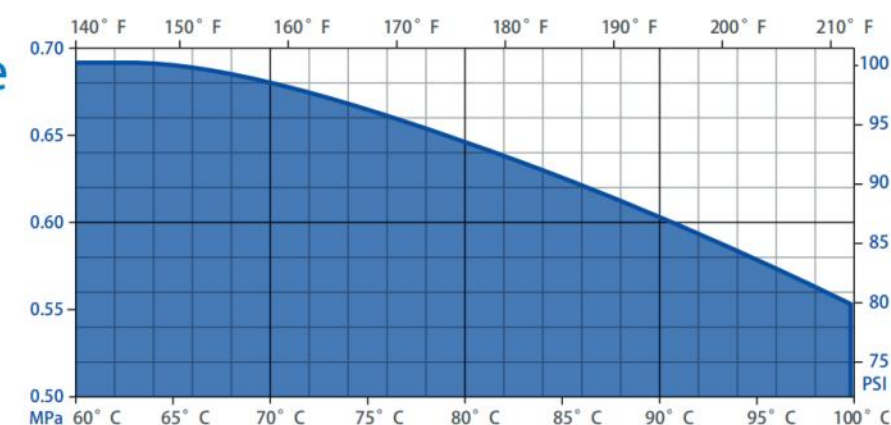


Product Features

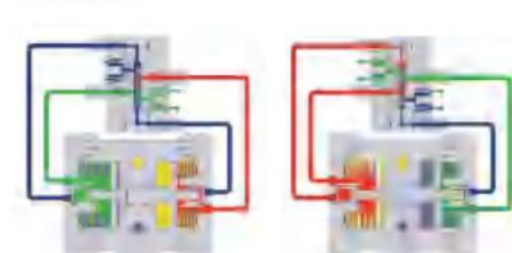
- Suitable for high-purity, highly corrosive environments
- Manufactured and tested in cleanroom environments
- Stable performance, meeting diverse application requirements
- Easy to disassemble and maintain
- Maximum temperature resistance up to 100° C
- High reliability, prevents contamination
- Non-metallic structure, pure PTFE/PFA fluid path
- No motor structure, does not generate heat
- Fiber optic sensor controls stroke length



temperature range



BSA-SERIES



BFA/BXA-SERIES



- Air supply
- Exhaust
- Ambient air
- Switching signal
- Liquid suction
- Liquid discharge

BSA SERIES



Model	BSA	30	/	PT	PT	/	PT	T	T	/	OB	0
S/N	1	2		3	4		5	6	7		8	9

S/N

Coding description

1 2	Grade BSA=Air valve-controlled bellows pump	Model 15=15L/min 30=25.8L/min 100=100L/min	
3 4	Fluid contact material PT=PTFE PF=PFA	Air path material PT=PTFE PF=PFA PE=UPE	
5 6 7	Air cushion material PT=PTFE PF=PFA	Valve ball base material T=PTFE F=PFA	Ball valve material T=PTFE F=PFA
8 9	Other OB=BSPT Threaded ON=NPT Threaded DF=DIN Flanged AF=ANSI Flanged JF=JIS Flanged	Auxiliary device 0=No accessory L=With leakage detection only S=With optical fiber stroke detection only M=With both leakage detection and optical fiber stroke detection	

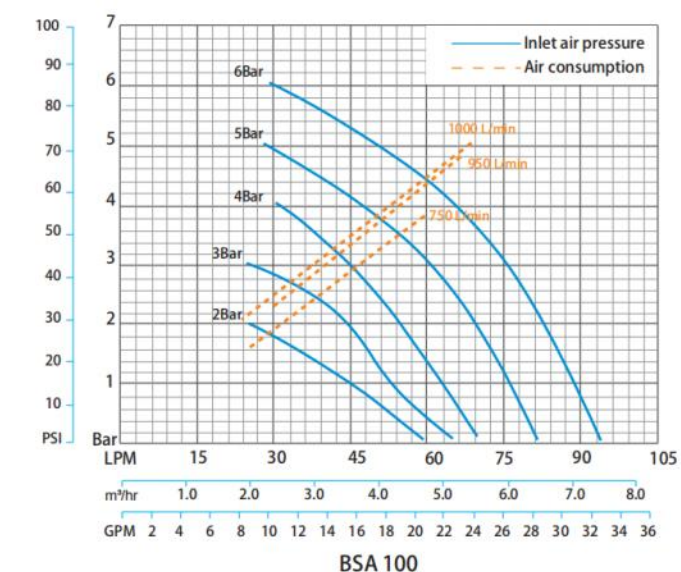
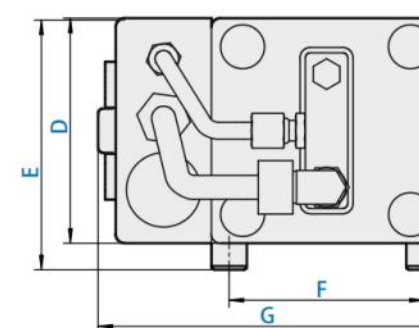
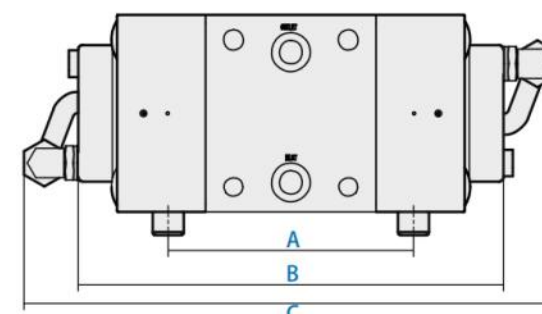
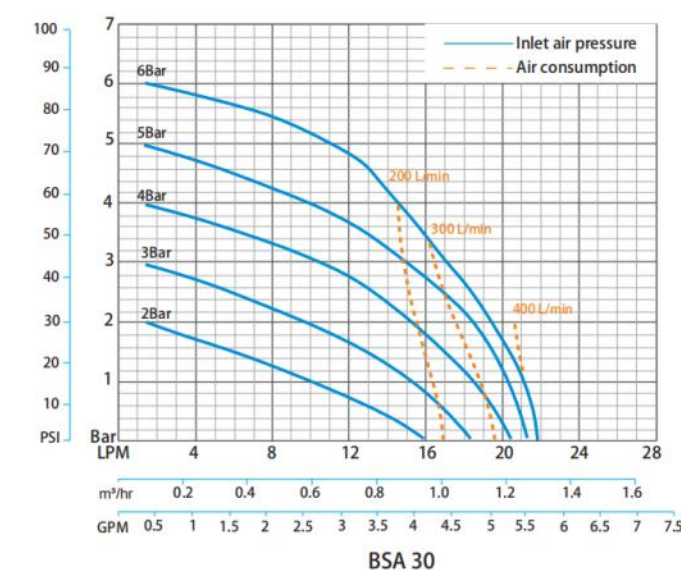
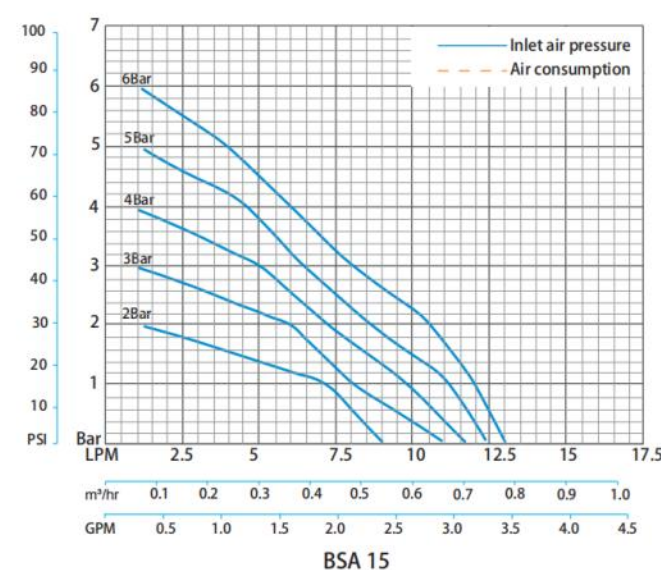
Technical specifications

Model	Maximum flow (lpm)	Inlet and outlet dimensions	Inlet size	Particle diameter (mm)	Dry suction capability(m)	Wet suction capability(m)	Weight
BSA 15	13	1/2"	3/8"	1.5	3	8.5	4.4
BSA 30	25.8	3/4"	3/8"	3	3.5	9	8
BSA 100	100	1-1/4"	3/8"	3	3.5	9.5	24.55

Operating pressure: 6.9Bar(100psi)

Casing temperature resistance: -37-104°C(PTFE)

Connection methods: BSPT/NPT (Threaded) ANSI/DIN/JIS (Flanged)



Model	A	B	C	D	E	F
BSA 15	128	220	290	132.5	85	174
BSA 30	158	274	345	141	110	193
BSA 100	214	374	428	206	170	269



BFA SERIES



型号	BFA	30	/	PT	PT	/	PT	T	T	/	OB	0
序号	1	2		3	4		5	6	7		8	9

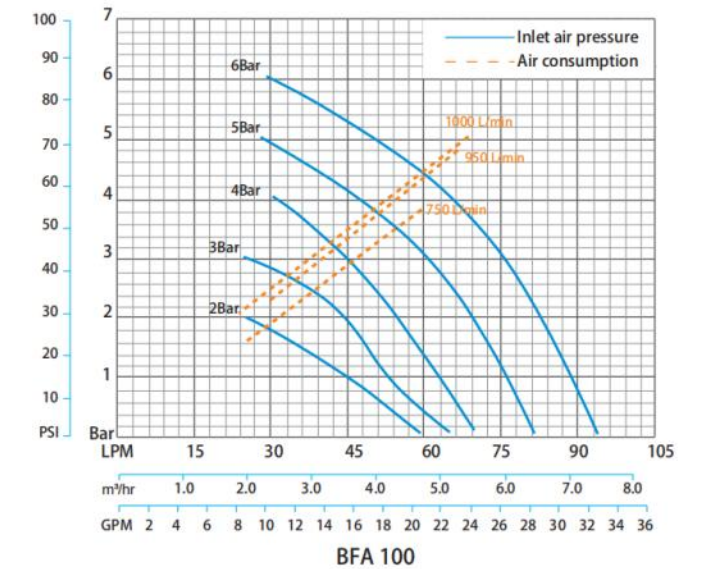
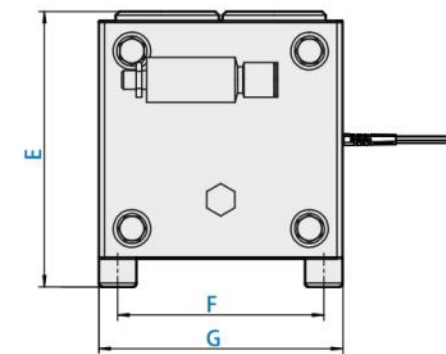
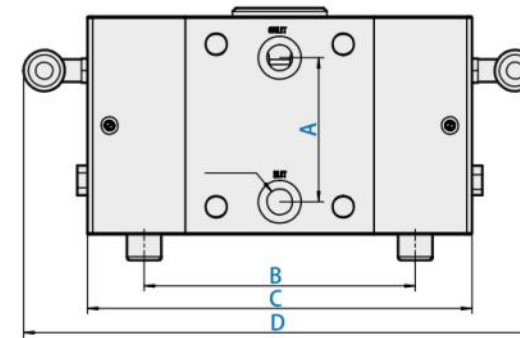
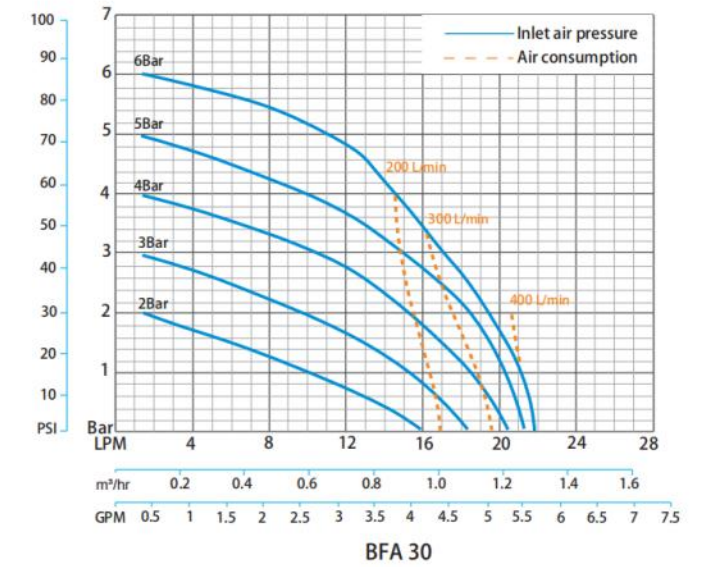
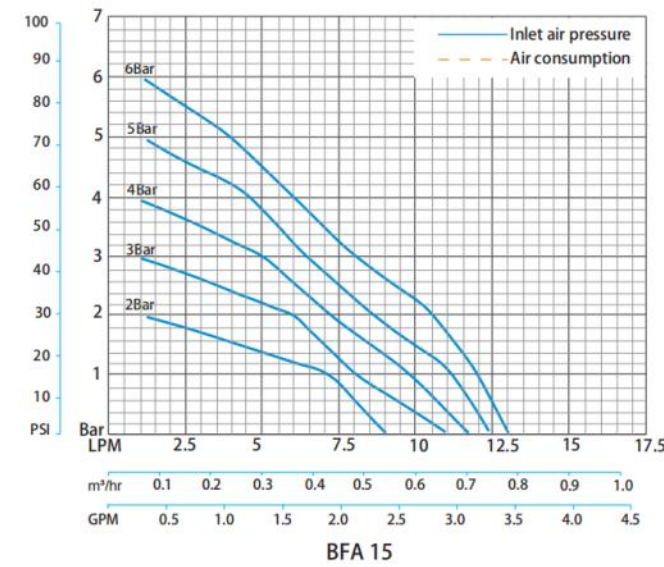
S/N

Coding description

1 2	Grade BSA=Fiber optic-controlled bellows pump	Model 15=15L/min 30=25.8L/min 100=100L/min	
3 4	Fluid contact material PT=PTFE PF=PFA	Air path material PT=PTFE PF=PFA PE=UPE	
5 6 7	Air cushion material PT=PTFE PF=PFA	Valve ball base material T=PTFE F=PFA	Ball valve material T=PTFE F=PFA
8 9	Other OB=BSPT Threaded ON=NPT Threaded DF=DIN Flanged AF=ANSI Flanged JF=JIS Flanged	Auxiliary device 0=No accessory L=With leakage detection only (with built-in magnifying glass) S=With optical fiber stroke detection only (with built-in magnifying glass) M=With both leakage detection and optical fiber stroke detection (with built-in magnifying glass)	

Technical specifications

Model	Maximum flow (lpm)	Inlet and outlet dimensions	Inlet size	Particle diameter (mm)	Dry suction capability(m)	Wet suction capability(m)	Weight
BFA 15	13	1/2"	3/8"	1.5	3	8.5	4.4
BFA 30	25.8	3/4"	3/8"	3	3.5	9	8
BFA 100	100	1-1/4"	3/8"	3	3.5	9.5	24.55
Operating pressure: 6.9Bar(100psi)							
Casing temperature resistance: -37-104°C(PTFE)							
Connection methods: BSPT/NPT (Threaded) ANSI/DIN/JIS (Flanged)							



Model	A	B	C	D	E	F	G
BFA 15	57	128	176	250.4	124	85.5	110
BFA 30	84	158	224	298.4	147	110	130
BFA 100	138	214	294	383.8	219	180	206



BXA SERIES



Model	BXA	30	/	PT	PT	/	PT	T	T	/	OB	0
S/N	1	2		3	4		5	6	7		8	9

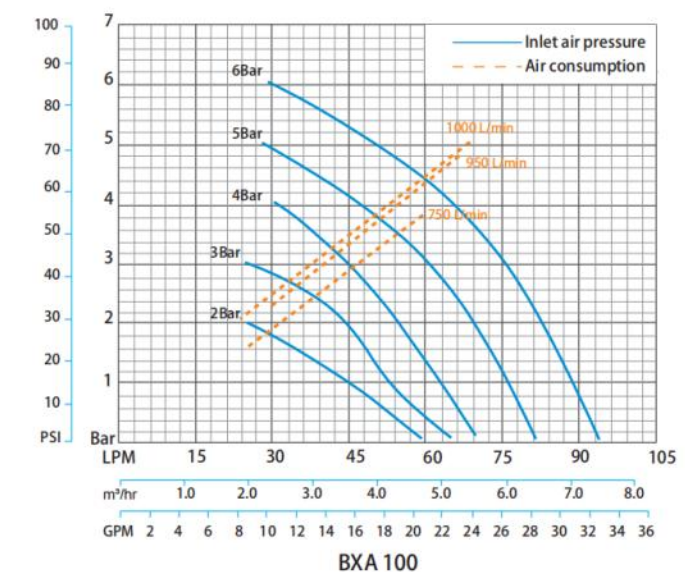
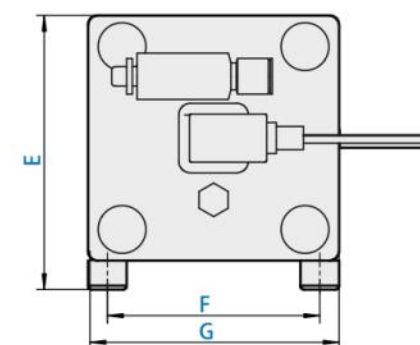
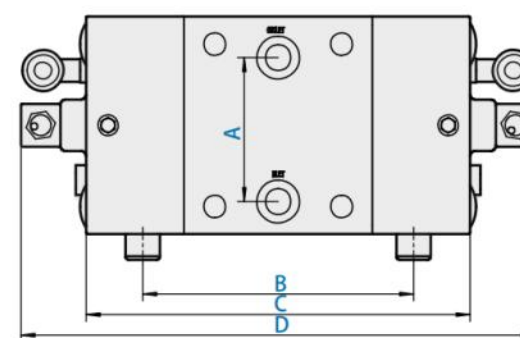
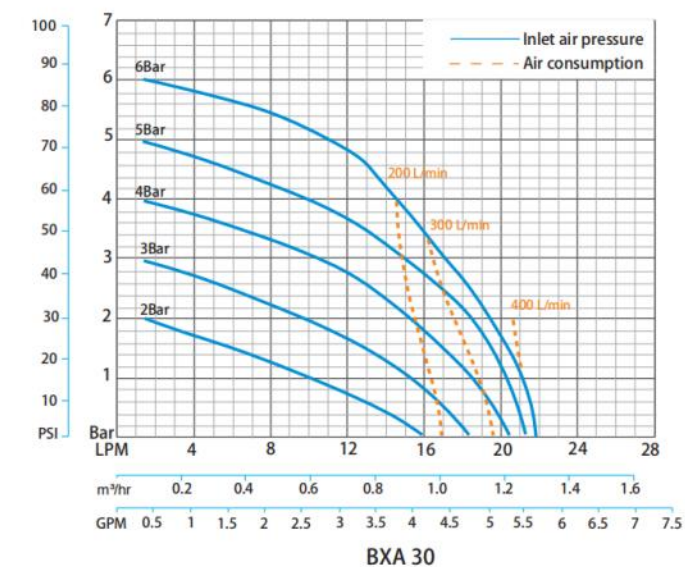
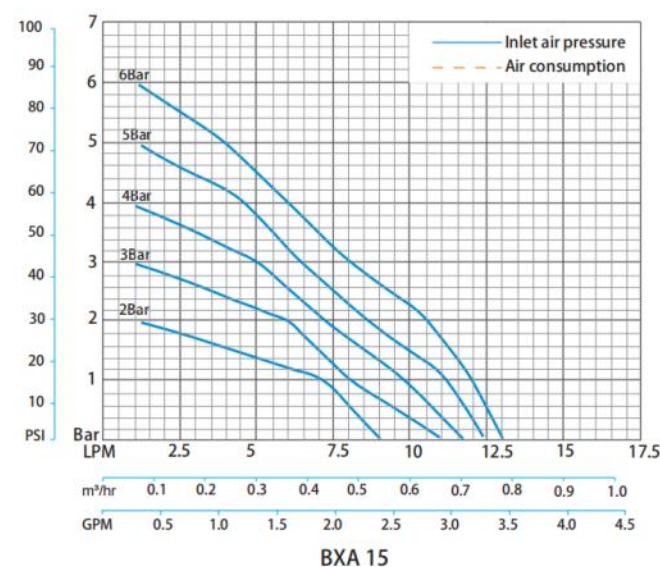
S/N

Coding description

1 2	Grade BSA=Proximity switch-controlled bellows pump	Model 15=15L/min 30=25.8L/min 100=100L/min	
3 4	Fluid contact material PT=PTFE PF=PFA	Air path material PT=PTFE PF=PFA PE=UPE	
5 6 7	Air cushion material PT=PTFE PF=PFA	Valve ball base material T=PTFE F=PFA	Ball valve material T=PTFE F=PFA
8 9	Other OB=BSPT Threaded ON=NPT Threaded DF=DIN Flanged AF=ANSI Flanged JF=JIS Flanged	Auxiliary device 0=No accessory L=With leakage detection only (with built-in magnifying glass) S=With optical fiber stroke detection only (with built-in magnifying glass) M=With both leakage detection and optical fiber stroke detection (with built-in magnifying glass)	

Technical specifications

Model	Maximum flow (lpm)	Inlet and outlet dimensions	Inlet size	Particle diameter (mm)	Dry suction capability(m)	Wet suction capability(m)	Weight
BXA 15	13	1/2"	3/8"	1.5	3	8.5	4.4
BXA 30	25.8	3/4"	3/8"	3	3.5	9	8
BXA 100	100	1-1/4"	3/8"	3	3.5	9.5	24.55
Operating pressure: 6.9Bar(100psi)							
Casing temperature resistance: -37-104°C(PTFE)							
Connection methods: BSPT/NPT (Threaded) ANSI/DIN/JIS (Flanged)							



Model	A	B	C	D	E	F	G
BXA 15	57	128	176	252	124	85.5	110
BXA 30	84	158	224	300	142	110	129
BXA 100	138	214	294	383.8	221	160	206



D-SERIES

Pressure tank



- Capable of reducing pulse amplitude by 50%-60% to stabilize pressure
- Enhance pipeline safety, preventing excessive impacts
- Reduce pipeline vibration and noise
- Simple installation

Model	D	15	/	PT	PE	/	MT	/	OB0
S/N	1	2		3	4		5		6

S/N

Coding description

2

Diameter

08=1/4"
15=1/2"
25=1"

40=1.5"
50=2"

3 4

Casing material

PE=UPE
DE=Conduct electricity UPE
PT= PTFE
DT=Conduct electricity PTFE

Intermediary body material

PE=UPE
DE=Conduct electricity UPE
PT= PTFE
DT=Conduct electricity PTFE

5 6

Diaphragm material

MM=EPDM double-layer diaphragm
MT=PTFE/EPDM double-layer diaphragm

Other

OB0=BSPT Threaded

