

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Казахстан +7(727)345-47-04

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Беларусь +(375)257-127-884

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Узбекистан +998(71)205-18-59

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

<https://bsk.nt-rt.ru> || bkh@nt-rt.ru

КАТАЛОГ



BSK Pneumatic
Diaphragm
Pump



Contents

Product	02
Application	03
Air Motor	04
Model Number & Performance Curve	05
1/4" Pump	06
1/2" Pump	07
1" Pump	08
1.5" Pump	09
2" Pump	10
3" Pump	11
How to Choose a Pump?	12
Wet Side Material Selection	13
Pump Connection and Installation	14

Product Line

Aluminum Alloy Pump



- + BA25AL
- + BA40AL
- + BA50AL
- + BA80AL



Plastic Pump



- + BP06PP
- + BP15PP
- + BA25PP
- + BA40PP
- + BA50PP



Stainless Steel Pump



- + BP15SS
- + BA25SS
- + BA40SS
- + BA50SS
- + BA80SS



Cast Iron or Carbon Steel Pump



- + BP15CS
- + BA25CS
- + BA40CS
- + BA50CI
- + BA80CI



APPLICATION

Machinery

Oil
Cutting fluid
Quenching oil
Electroplate liquid
Liquid waste

Electron

Acid
Alkali
Waste water

Coal Mine

Waste water
Water seepage
Slush

Food & medicine

Liquid material
Additive
Condiment

Chemical

Acid
Caustic
Solvent
Paint
Shear sensitive material

Automobile

Oil
Solvent
Paint
Aquaseal
Waste water

INDUSTRY



Air Motor

Surface coating

- + Corrosion resistance

Module structure

- + Commonly used
- + Less spare part & less cost

Exhaust room plus muffler

- + Lower noise
- + Less iced possible

Chip valve, ceramic material

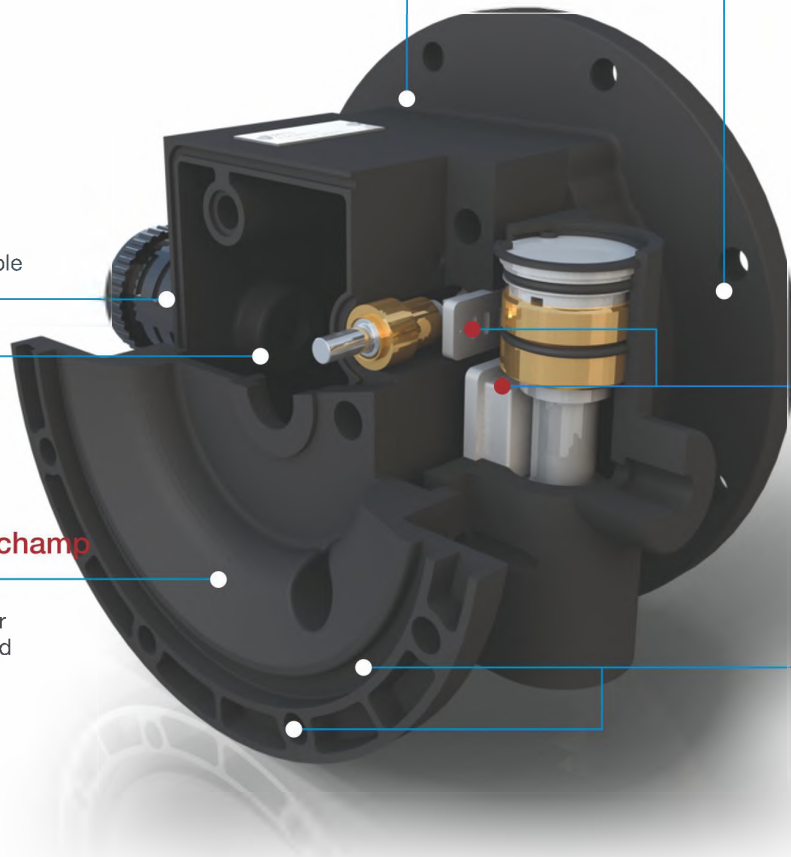
- + wear resistant
- + resistance soiling

Professional design for air champ

- + Less room for air consumption and less cost

Groove seal structure and bolt clamping

- + good for seal reliability



Main Air Valve



Main air valve concise, but not simple

- + Less components
- + Good for maintain

Model Number & Performance Curve

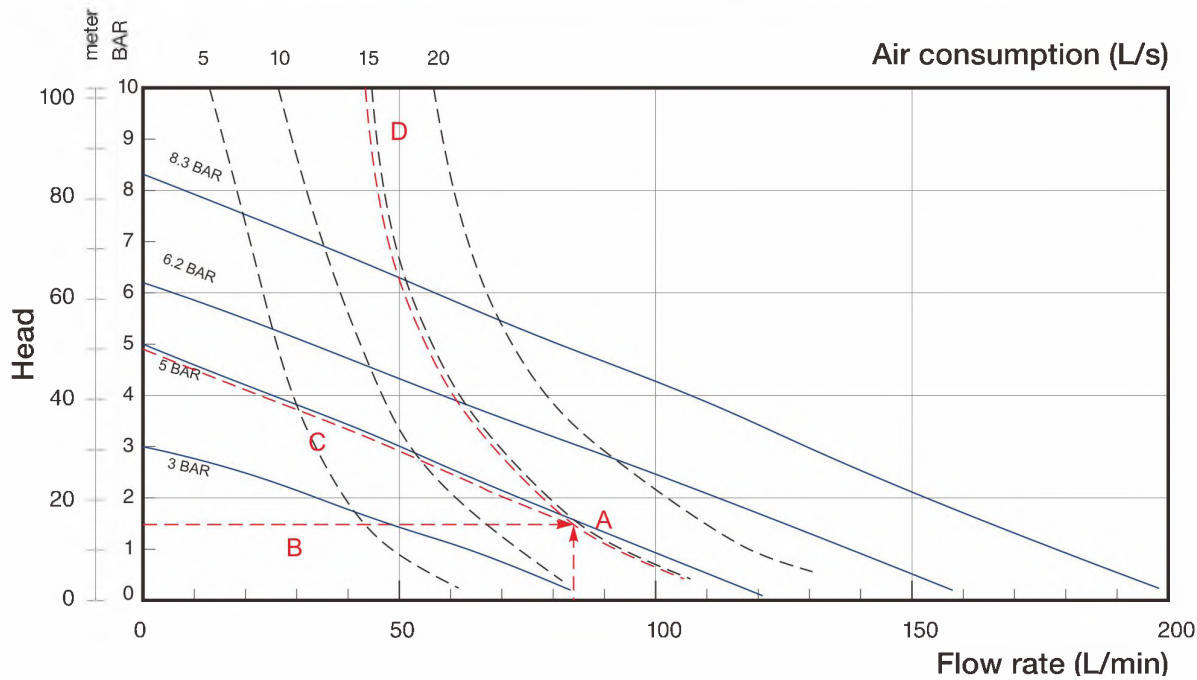
Model Chart

B X 00 XX - XXXX - X (- XX)

Center body	Port size	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port	Code for special order
P - Polypropylene A - Aluminum alloy	06 - 1/4" 15 - 1/2" 25 - 1" 40 - 1.5" 50 - 2" 80 - 3"	PP - Polypropylene SS - Stainless steel CS - Carbon steel AL - Aluminum CI - Cast Iron	P - Polypropylene S - Stainless steel C - Carbon steel 0 - Aluminum 7 - Nylon 9 - Santoprene® D - POM	9 - Santoprene® H - Hytrel® T - PTFE S - Stainless steel 7 - Nylon 8 - Santoprene® w/steel core P - UPE	9 - Santoprene® B - NBR H - Hytrel® T - PTFE/Santoprene®	0 - Non 1 - NBR 3 - PTFE(FULL) 4 - PTFE(COVER) 5 - FKM	A - BSP (thread) B - NPT C - Flange	

Performance Curve

A	B	C	D
Select the fluid rate (for example: 87 l.p.m)	Select the head of delivery (for example: 28 m)	Check the inlet air pressure (for example: 6.2 bar)	To get the air consumption rate (for example: 19 l.p.s)



1/4" Pump

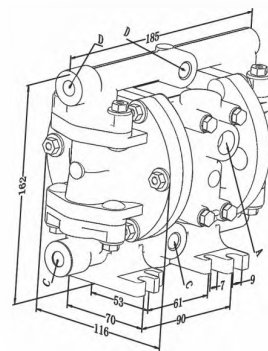
B P 06 XX - XXXX - X

Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Polypropylene	PP - Polypropylene	P - polypropylene	9 - Santoprene® T - PTFE S - Stainless steel P - UPE	9 - Santoprene® T - PTFE	1-NBR 4-PTFE(COVE)	B-NPT

- ★ Small size, less room request for installation.
- ★ Side port design. Middle port is possible

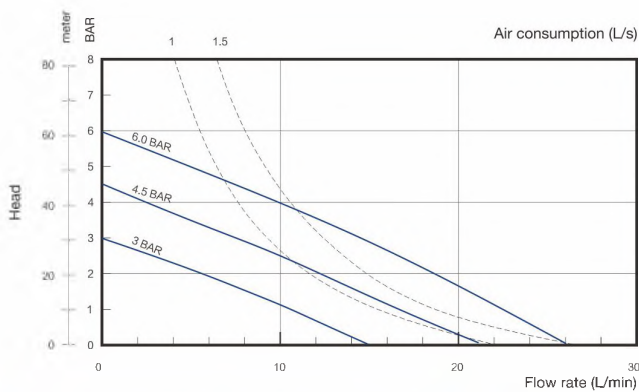
PUMP DATA

Working air pressure	0.09-0.60 Mpa
Maximum outlet pressure	0.60 Mpa
Maximum flow rate	26.1 lpm
Maximum particle size	1 mm
Maximum dry suction	4.2 m
Noise level @70psi	68 dB
Weight	1.3 kg



Plastic pump

PERFORMANCE CURVE



Port size	A	B	C	D
	Air Inlet	Exhaust	Inlet	Outlet
	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT

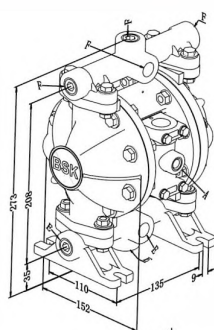
1/2" Pump

B P 15 XX - XXXX - X

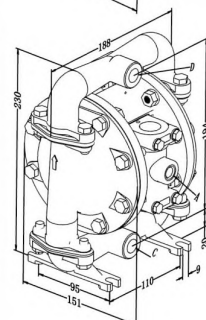
Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Polypropylene	PP - Polypropylene SS - Stainless steel CS - Carbon steel	P - Polypropylene S - Stainless steel	9 - Santoprene® T - PTFE S - Stainless steel P - UPE	9 - Santoprene® T - PTFE/Santoprene®	1 - NBR 4 - PTFE(COVER)	A - BSP (thread) B - NPT



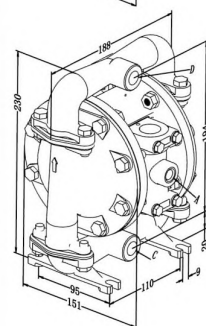
Plastic pump



Stainless steel pump



Carbon steel pump

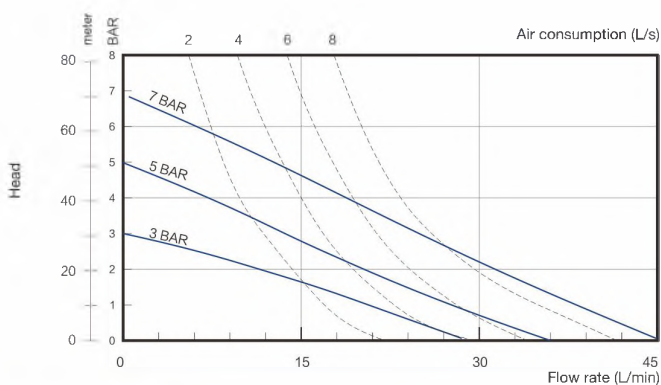


- ★ Small size, less room request for installation.
- ★ Multiple port for selection

PUMP DATA

Working air pressure	0.15 – 0.69 Mpa
Maximum outlet pressure	0.69 Mpa
Maximum flow rate	45.3 lpm
Maximum particle size	2.5 mm
Maximum dry suction	4.1 m
Noise level @70psi	75 dB
Weight	Plastic 2.4 kg
	Stainless steel 5.5 kg
	Carbon steel 5.5 kg

PERFORMANCE CURVE



Port size	A	B	C	D	E	F
	Air Inlet	Exhaust	Inlet	Outlet	Inlet	Outlet
	1/4" NPT	3/8" NPT	1/2-14 BSP Rp	1/2-14 BSP Rp	1/2" NPT	1/2" NPT

1" Pump

B A 25 XX - XXXX - X

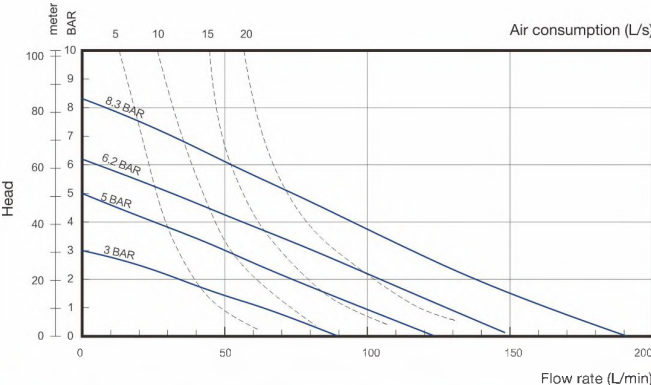
Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Aluminum alloy	PP - Polypropylene SS - Stainless steel CS - Carbon steel AL - Aluminum	P - Polypropylene S - Stainless steel C - Carbon steel 0 - Aluminum 9 - Santoprene® D - POM	9 - Santoprene® H - Hytrel® T - PTFE S - Stainless steel 7 - Nylon 8 - Santoprene® w/steel core P - UPE	9 - Santoprene® B - NBR H - Hytrel® T - PTFE/Santoprene®	1 - NBR 3 - PTFE(FULL) 4 - PTFE(COVER) 5 - FKM	A-BSP (thread) C-Flange

★ Flange size meet both ANSI and DIN

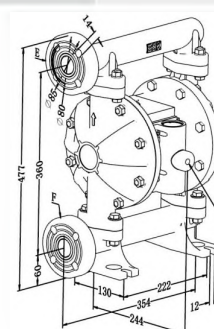
PUMP DATA

Working air pressure	0.10-0.83 Mpa	
Maximum outlet pressure	0.83 Mpa	
Maximum flow rate	192 lpm	
Maximum particle size	3 mm	
Maximum dry suction	6.7 m	
Noise level @70psi	75 dB	
Weight	Plastic	9.5 kg
	Stainless steel	14.5 kg
	Carbon steel	14.5 kg
	Aluminum	9.5 kg

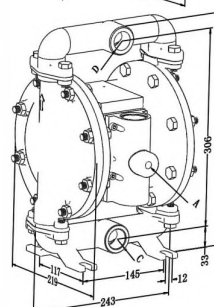
PERFORMANCE CURVE



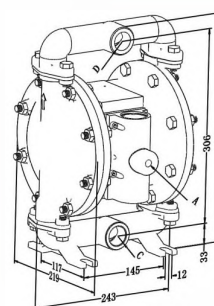
Port size	A	B	C	D	E	F
	Air Inlet	Exhaust	Inlet	Outlet	Inlet	Outlet
	1/4" NPT	3/8" NPT	1" BSP	1" BSP	1" FLANGE	1" FLANGE



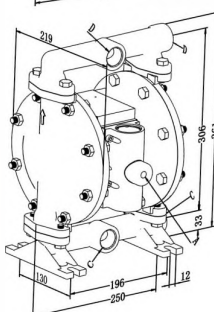
Plastic pump



Stainless steel pump



Carbon steel pump



Aluminum alloy pump

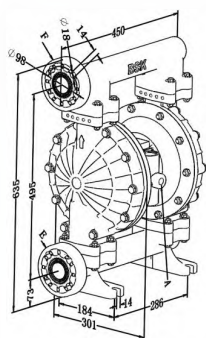
1.5" Pump

B A 40 XX - XXXX - X

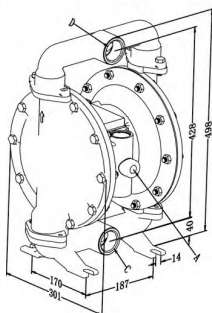
Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Aluminum alloy	PP - Polypropylene SS - Stainless steel CS - Carbon steel AL - Aluminum	P - Polypropylene S - Stainless steel C - Carbon steel 0 - Aluminum 9 - Santoprene®	9 - Santoprene® H - Hytrel® T - PTFE 8 - Santoprene® w/steel core P - UPE	9 - Santoprene® H - Hytrel® T - PTFE/Santoprene®	0 - Non 1 - NBR 3 - PTFE(FULL) 4 - PTFE(COVER)	A - BSP (thread) C - Flange



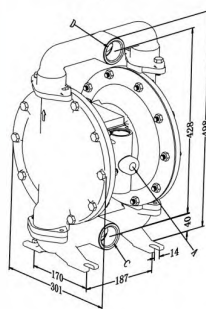
Plastic pump



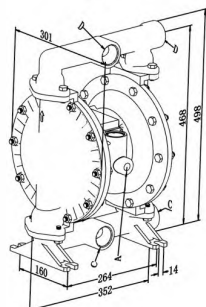
Stainless steel pump



Carbon steel pump



Aluminum alloy pump

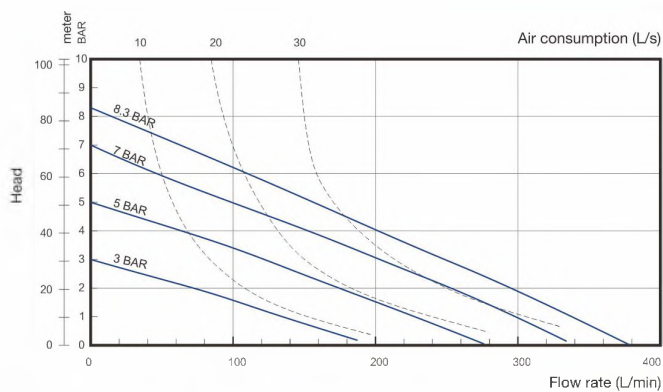


★ Flange size meet both ANSI and DIN

PUMP DATA

Working air pressure	0.10-0.83 Mpa
Maximum outlet pressure	0.83 Mpa
Maximum flow rate	378.5 lpm
Maximum particle size	6 mm
Maximum dry suction	6.7 m
Noise level @70psi	75 dB
Weight	Plastic 19 kg
	Stainless steel 30 kg
	Carbon steel 30 kg
	Aluminum 18 kg

PERFORMANCE CURVE



Port size	A	B	C	D	E	F
	Air Inlet	Exhaust	Inlet	Outlet	Inlet	Outlet
	1/2" NPT	3/4" NPT	1 1/2" BSP	1 1/2" BSP	1 1/2" FLANGE	1 1/2" FLANGE

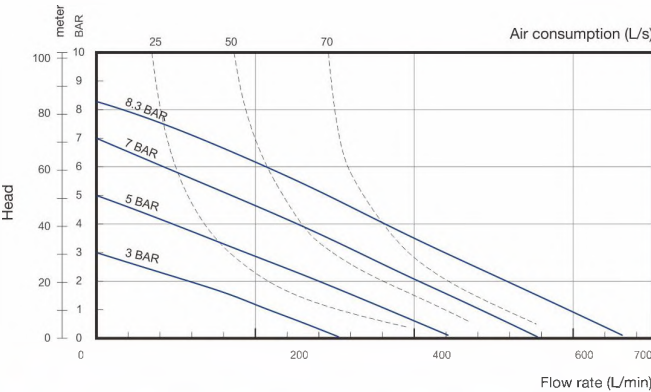
2" Pump

Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Aluminum alloy	PP - Polypropylene SS - Stainless steel CS - Carbon steel AL - Aluminum	P - Polypropylene S - Stainless steel C - Carbon steel 0 - Aluminum 9 - Santoprene® D - POM	9 - Santoprene® H - Hytrel® T - PTFE 8 - Santoprene® w/steel core P - UPE	9 - Santoprene® H - Hytrel® T - PTFE/Santoprene®	0 - Non 1 - NBR 3 - PTFE(FULL) 4 - PTFE(COVER)	A - BSP (thread) C - Flange

- ★ Flange size meet both ANSI and DIN
- ★ Cast iron pump: BSP thread port optional

PUMP DATA

Working air pressure	0.10-0.83 Mpa	
Maximum outlet pressure	0.83 Mpa	
Maximum flow rate	667 lpm	
Maximum particle size	7 mm	
Maximum dry suction	6.2 m	
Noise level @70psi	75 dB	
Weight	Plastic	26 kg
	Stainless steel	53 kg
	Carbon steel	48.5 kg
	Aluminum	24.5 kg



Port size	A	B	C	D	E	F
	Air Inlet	Exhaust	Inlet	Outlet	Inlet	Outlet
	3/4" NPT	3/4" NPT	2" BSP	2" BSP	2" FLANGE	2" FLANGE



Plastic pump



Stainless steel pump



Carbon steel pump



Aluminum alloy pump

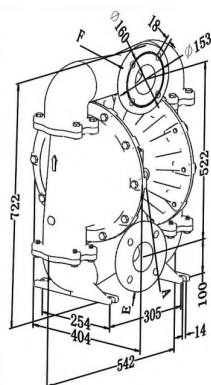
3" Pump

B A 80 XX - XXXX - X

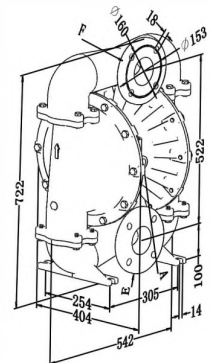
Center body	Housing material	Seat material	Ball material	Diaphragm material	O-ring material	Port
Aluminum alloy	SS - Stainless steel CS - Carbon steel CI - Cast Iron	S - Stainless steel C - Carbon steel O - Aluminum 9 - Santoprene® D - POM	9 - Santoprene® H - Hytrel® T - PTFE P - UPE	9 - Santoprene® H - Hytrel® T - PTFE/Santoprene®	0 - Non 1 - NBR 3 - PTFE(FULL)	A - BSP (thread) C - Flange



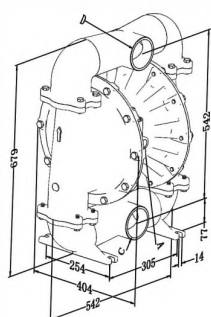
Stainless steel pump



Carbon steel pump



Aluminum alloy pump



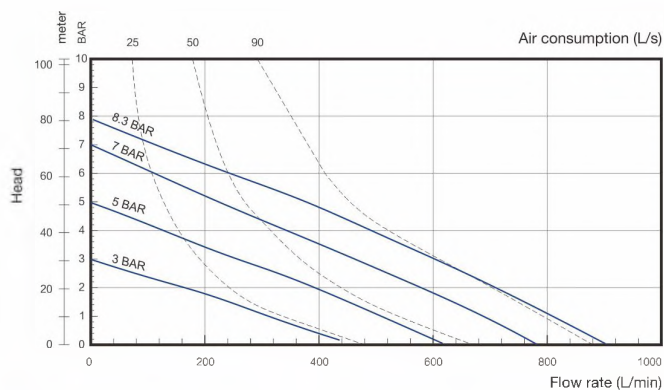
★ Flange size meet both ANSI and DIN

★ Cast iron pump: BSP thread port optional

PUMP DATA

Working air pressure	0.10-0.83 Mpa
Maximum outlet pressure	0.83 Mpa
Maximum flow rate	903 lpm
Maximum particle size	9 mm
Maximum dry suction	5.3 m
Noise level @70psi	75 dB
Weight	Plastic 95 kg
	Stainless steel 91 kg
	Carbon steel 42 kg

PERFORMANCE CURVE



Port size	A	B	C	D	E	F
Air Inlet	Exhaust	Inlet	Outlet	Inlet	Outlet	
3/4" NPT	3/4" NPT	3" BSP	3" BSP	3" FLANGE	3" FLANGE	

How to choose a pump?

Flow rate

First, make sure the pump size according to the flow rate request

Wet side material

Second, select appropriate wet side components according to material chemical characteristics



Pump Data



Pump size	BP06	BP15	BA25	BA40	BA50	BA80
Working air pressure(bar)	0.9-6.0	1.5-6.9	1.0-8.3	1.0-8.3	1.0-8.3	1.0-8.3
Port size	1/4"	1/2"	1"	1.5"	2"	3"
Maximum flow rate (L/min)	26.1	45.3	192	378.5	667	903
Displacement per cycle (L)	0.06	0.14	0.87	2.83	3.78	7.67
Maximum head of delivery (m)	60	70	60	80	80	80
Maximum dry suction (m)	4.2	4.1	6.7	6.7	6.2	5.3
Maximum particle size	1	2.5	3	6	7	9

Wet Side Material Selection

Diaphragm Selection

+ =Excellent ✓=Good !=Fair ×=Poor

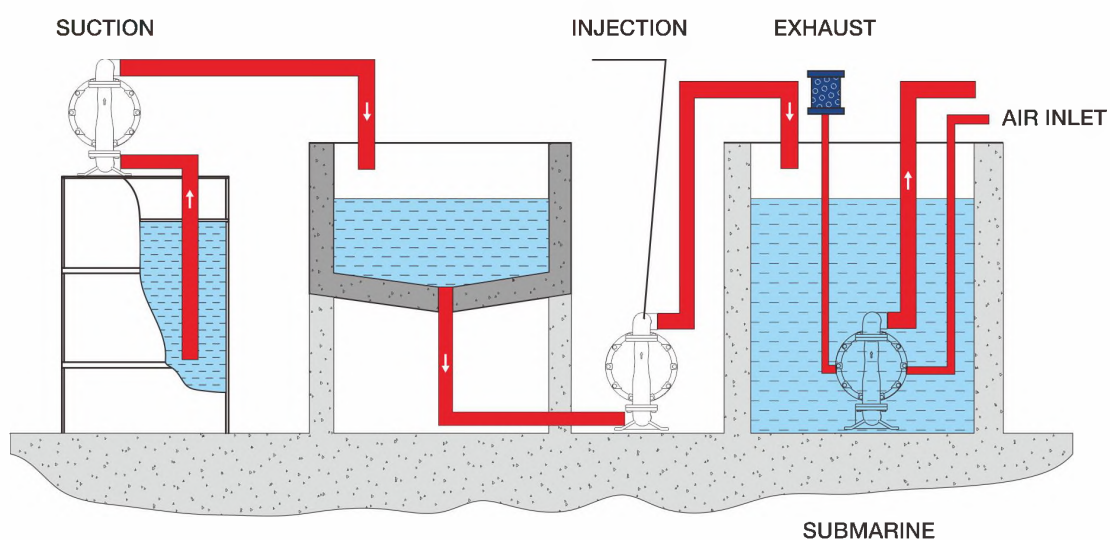
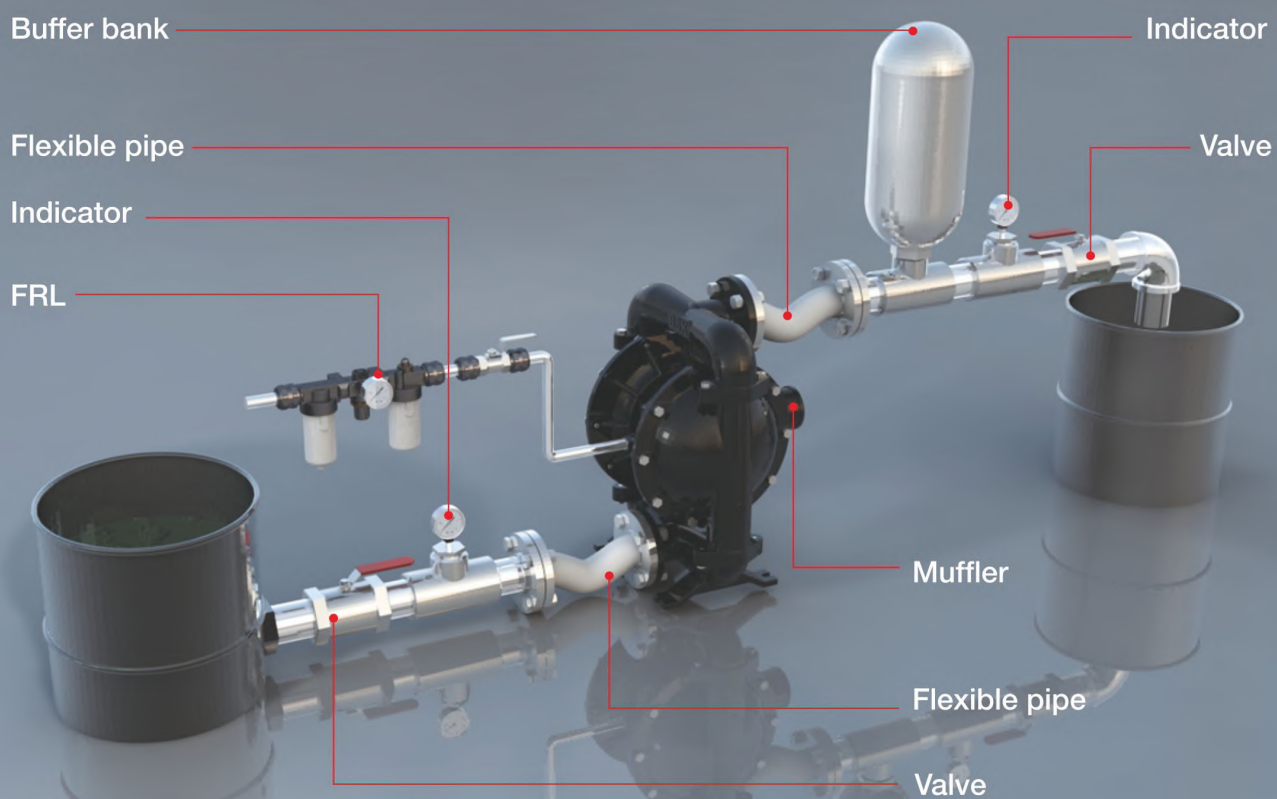
Diaphragm material	Lifespan	Wear Resistant	Chemical Compatibility	Thermal endurance	Temperature (minimum)	Temperature (maximum)
PTFE	+	+	+	+	40°F/4.4°C	220°F/104°C
Santoprene®	+	+	✓	✓	-40°F/-40°C	225°F/107.2°C
Hytrel®	+	+	✓	✓	32°F/0°C	175°F/79.4°C
FKM	×	!	+	+	-40°F/-40°C	350°F/176.6°C
NBR	+	✓	!	!	10°F/-12°C	180°F/82°C

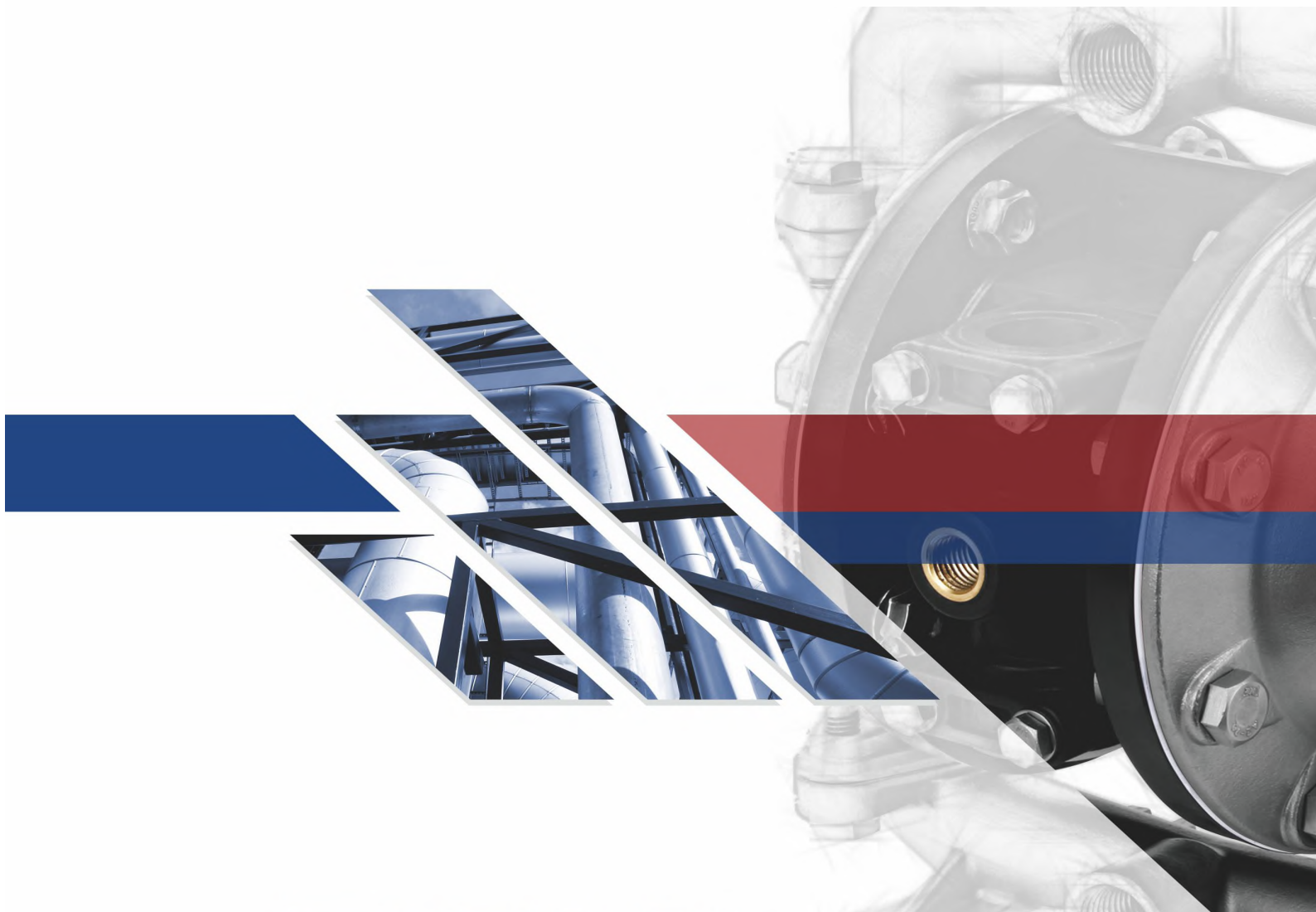
Wet component selection

+ =Excellent ✓=Good !=Fair ×=Poor

Wet side part	Material	Chemical corrosion resistant				Abrasion resistance		Thermal endurance	Adhere resistant
		Non	Slight	Middle	Serious	Slight	Serious		
HOUSING	AL	+	×	×	×	✓	×	+	
	SS	+	+	✓	✓	+	+	+	
	CI	+	×	×	×	+	+	+	
	PP	+	+	✓	✓	✓	×	✓	
	PVDF	+	+	+	+	+	✓	✓	
SEAT	AL	+	×	×	×	✓	×	+	
	SS	+	+	✓	✓	+	+	+	
	CI	+	×	×	×	+	+	+	
	PP	+	+	✓	✓	✓	×	✓	
	PVDF	+	+	+	+	+	✓	✓	
	Santoprene®	+	✓	!	!	+	+	✓	
	Hytrel®	+	+	✓	!	+	✓	✓	
BALL	SS	+	+	+	✓	✓	+	+	+
	Santoprene®	+	✓	!	!	+	+	✓	!
	Hytrel®	+	+	✓	!	+	✓	✓	!
	UPE	+	+	+	+	+	+	✓	+
	PTFE	+	+	+	+	+	✓	✓	+
	NBR	+	✓	!	×	✓	✓	✓	
VALVE SEALING	NBR	+	✓	!	×	✓	✓	✓	+
	PTFE	+	+	+	+	+	✓	✓	+

Connection & installation





Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Казахстан +7(727)345-47-04

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (205)81-47

Беларусь +(375)257-127-884

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Узбекистан +998(71)205-18-59

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

<https://bsk.nt-rt.ru> || bkh@nt-rt.ru