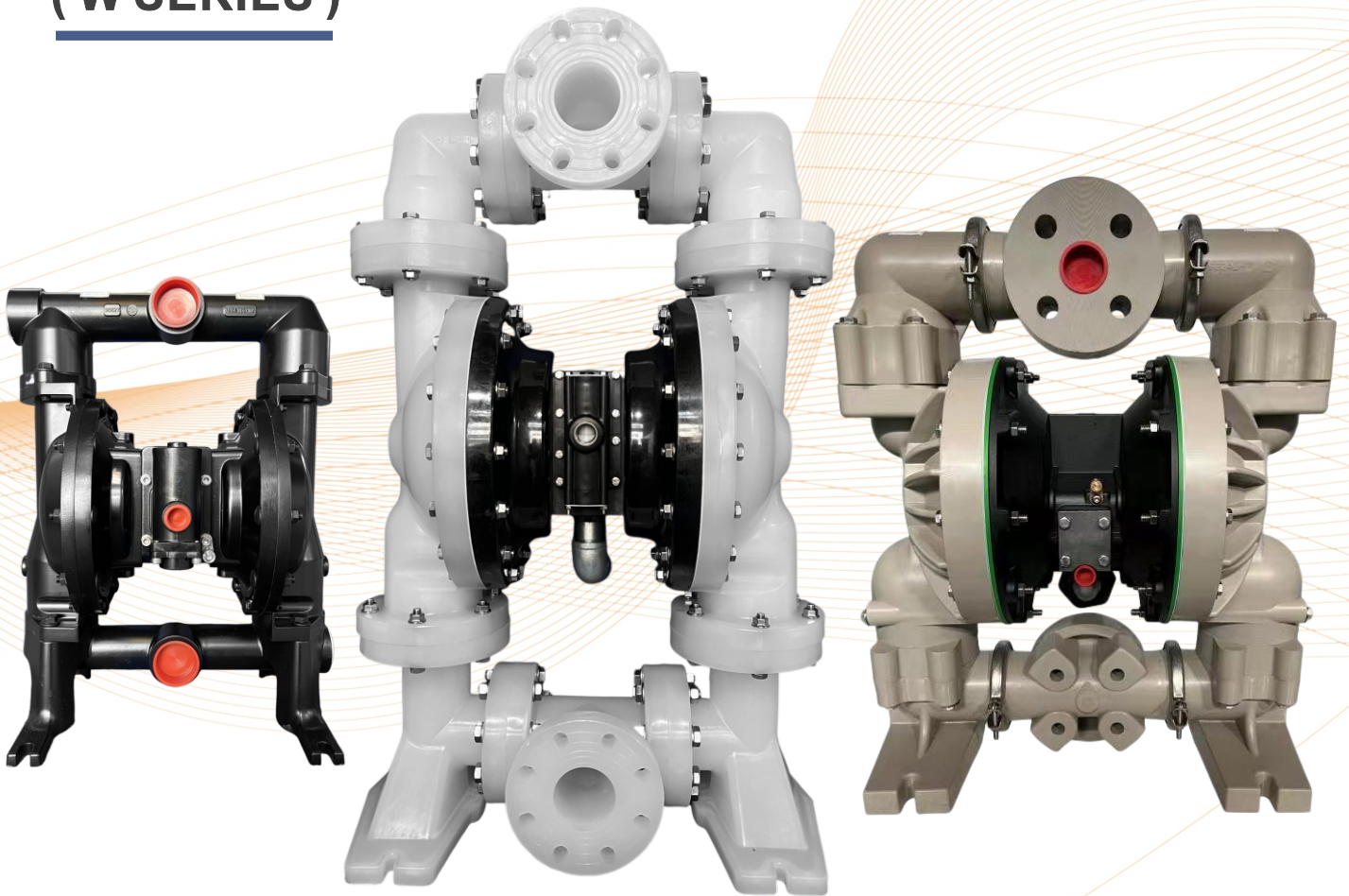




AIR OPERATED DOUBLE DIAPHRAGM PUMPS

(W SERIES)



QINGDAO NUODEAN PUMP CO., LTD



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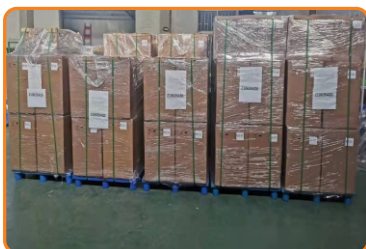
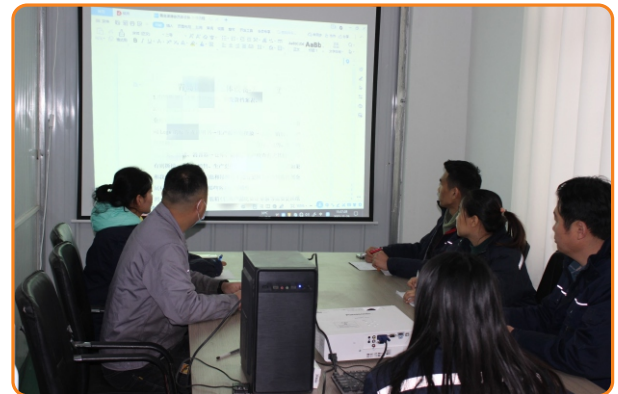
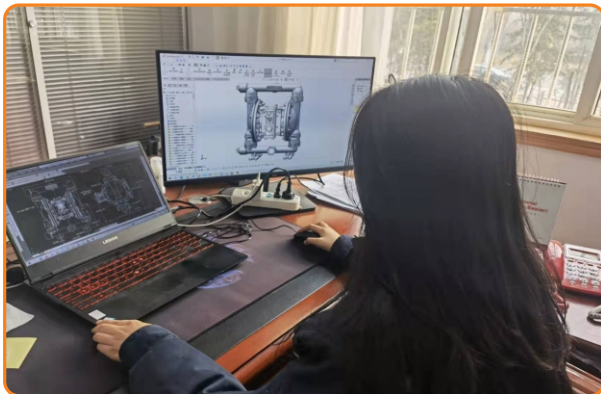
Qingdao Nuodean Pump Co., Ltd, located in Qingdao, Shandong, China, is a company specializing in the research and development, production, sales and service of diaphragm pumps. Our company has been established for many years and has rich professional knowledge and relevant experience. Since the establishment of the company, the products have been sold to many countries around the world. The product quality and performance have been verified by on-site use for many years, and have been recognized and praised by customers. We have our own professional technology and have obtained a number of patents, we are professional in the field of pneumatic diaphragm pumps.

Our W series products have good compatibility & interchangeability with other companies, including the installation dimensions and their spare parts.

Our company has always pursued "excellence and continuous innovation". In addition to the W Series products, our company has developed our own products, and obtained patents. If you want to know more details, you can read the catalogue of our DP Series products.

Thank you for reading the introduction about our company. Our company believes that we can cooperate very quickly, and our company believes that our cooperation will be very exciting and brilliant. We will benefit from each other, make progress together, and move towards tomorrow's brilliance and success.







Material Service Guideline

This chart is a quick reference guide. Always check material compatibility with a trusted chemical guide.

	Scale 1 - 5 (5 is best)			
	Max. Operating Temp Limit F (C)	Chemical Resistance	Abrasion Resistance	Flex Life*
Acetal	180 (82)	3	3	-
Aluminum	-	1	3	-
Cast Iron	-	3	4	-
Geolast (Nitrile Based)	180 (82)	2	2	3
Hastelloy C	-	5	-	-
Hytre	150 (66)	2	4	4
Neoprene	200 (93)	2	2	3
Nitrile	180 (82)	2	2	3
Polypropylene	175 (80)	4	2	-
Polyurethane	150 (66)	1	4	4
PTFE	225 (107)	5	2	4**
PVDF	200 (93)	5	2	-
Santoprene	225 (107)	4	4	5
Stain Steel (300 Series)	-	4	4	-
Stain Steel (400 Series)	-	3	5	-
Viton	350 (177)	4	2	1

* Applies to diaphragms only.
 ** Increased flex life with use of santoprene diaphragm backer.

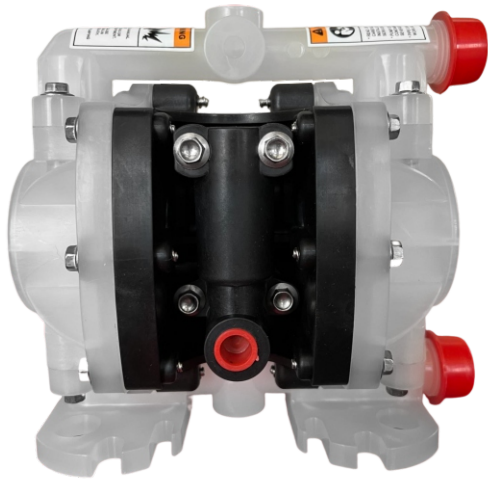
NOTE: Temperatures are reference for materials only. Refer to operator's manual for maximum pump operating temperature.

Viscosity Conversion Chart

Centi Poise	Poise	Saybolt Universal (SSU)	Saybolt Furol	Ford No. 3	Ford No. 4	Zahn No. 1	Zahn No. 2	Zahn No. 3
1	.01	31						
2	.02	34						
4	.04	38						
7	.07	47		8				
10	.10	60		9	5	30	16	
15	.15	80	13	10	8	34	17	
20	.20	100	15	12	10	37	18	
25	.24	130	17	15	12	41	19	
30	.30	160	19	19	14	44	20	
40	.40	210	24	25	18	52	22	
50	.50	260	29	29	22	60	24	
60	.60	320	34	33	25	68	27	
70	.70	370	39	36	28	72	30	
80	.80	430	42	41	31	81	34	
90	.90	480	49	45	32	88	37	10
100	1.0	530	54	50	34		41	12
120	1.2	580	59	58	41		49	14
140	1.4	690	70	66	45		58	16
160	1.6	790	79	72	50		66	18
180	1.8	900	91	81	54		74	20
200	2.0	1000	100	90	58		82	23
220	2.2	1100	110	98	62		88	25
240	2.4	1200	120	106	65			27
260	2.6	1280	128	115	68			30
280	2.8	1380	138	122	70			32
300	3.0	1475	148	130	74			34
320	3.2	1530	153	136	89			36
340	3.4	1630	163	142	95			39
360	3.6	1730	173	150	100			41
380	3.8	1850	185	160	106			43
400	4.0	1950	195	170	112			46
420	4.2	2050	205	180	118			48
440	4.4	2160	216	188	124			50
460	4.6	2270	227	200	130			52
480	4.8	2380	238	210	137			54
500	5.0	2480	248	218	143			58
550	5.5	2660	266	230	153			64
600	6.0	2900	290	250	170			68
700	7.0	3380	338	295	194			76
800	8.0	3880	388	340	223			
900	9.0	4300	430	365	247			
1000	10.0	4600	460	390	264			
1100	11	5200	520	445	299			
1200	12	5620	562	480	323			
1300	13	6100	610	520	350			
1400	14	6480	648	550	372			
1500	15	7000	700	595	400			
1600	16	7500	750	635	430			
1700	17	8000	800	680	460			
1800	18	8500	850	720	490			
1900	19	9000	900	760	520			
2000	20	9400	940	800	540			
2100	21	9850	985	835	565			
2200	22	10300	1030	875	592			
2300	23	10750	1075	910	617			
2400	24	11200	1120	950	645			
2500	25	11600	1160	985	676			
3000	30	14500	1450	1230	833			
3500	35	16500	1650	1400	950			
4000	40	18500	1850	1570	1060			
4500	45	21000	2100	1780	1175			
5000	50	23500	2350		1350			
5500	55	26000	2600		1495			
6000	60	28000	2800		1605			
6500	65	30000	3000		1720			
7000	70	32500	3250		1870			
7500	75	35000	3500		2010			
8000	80	37000	3700		2120			
8500	85	39500	3950		2270			
9000	90	41000	4100		2360			
9500	95	43000	4350		2470			
10000	100	46500	4650		2670			
15000	150	69400	6940					
20000	200	92500	9250					
30000	300	138600	13860					
40000	400	185000	18500					
50000	500	231000	23100					
60000	600	277500	27750					
70000	700	323500	32350					
80000	800	370000	37000					
90000	900	415500	41550					
100000	1000	462000	46200					
125000	1250	578000	57800					
150000	1500	694000	69400					
175000	1750	810000	81000					
200000	2000	925000	92500					

Non-Metallic Air Operated Double Diaphragm Pump Overview:

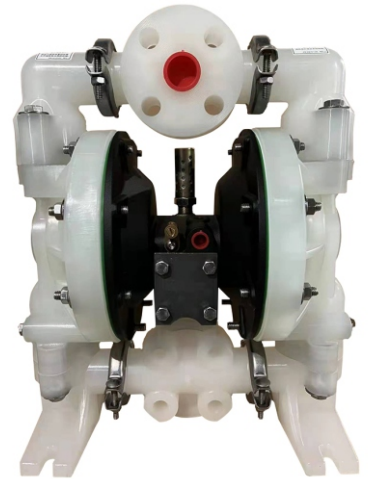
■ 1/4"
MODEL: WB01P-HXS-XXX



■ 1/2"
MODEL: WA05X-XXX



■ 1"
MODEL: WA1XX-XXX



■ 1"
MODEL: WB10X-XXS-XXX



■ 1-1/2"
MODEL: WA1T3-XXX



■ 1-1/2"
MODEL: WB15X-XXS-XXX



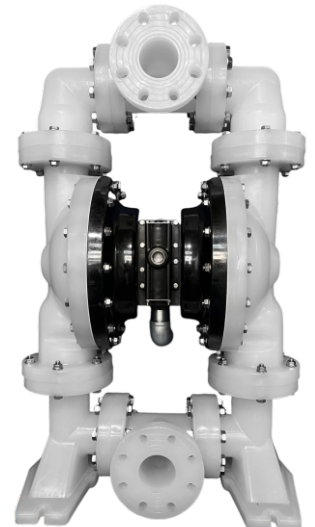
■ 2"
MODEL: WA2A3-XXX



■ 2"
MODEL: WB20X-FXS-XXX



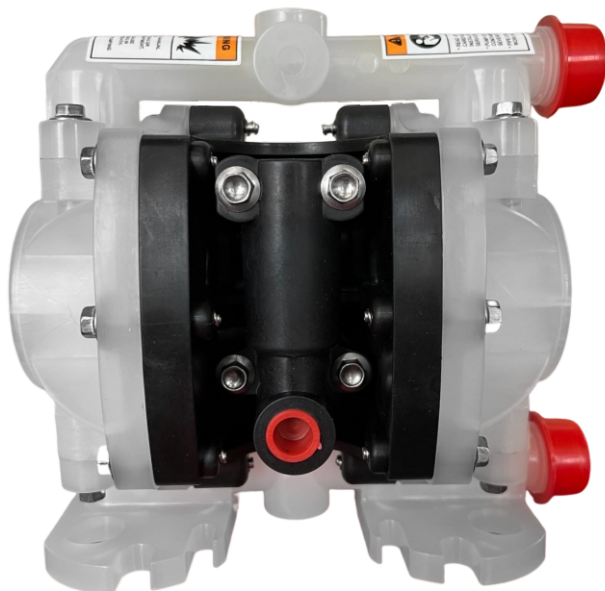
■ 3"
MODEL: WB30P-XXS-XXX



1/4" WB NON-METALLIC Models MODEL: WB01P-HXS-XXX

SPECIFICATION:

Ratio:	1:1
Maximum Flow:	5.3 g.p.m. (20) l.p.m.
Displacement per cycle:	0.019 Gallons(0.072 Liters)
Air Inlet (Female):	1/4 - 18 PTF SAE Short
Fluid Inlet/Outlet Hybrid:	Internal Thread 1/4"NPTF/BSPT External Thread 3/4" - 14 NPTF/BSPT
Max. operating pressure psi (bar):	125 (8.6)
Suspended solids max. dia. in.(mm):	1/16" (1.66)
Weight lbs (kg):	2.86 (1.3) Polypropylene 3.88 (1.76) PVDF
Maximum dry suction lift ft(m) :	15 (4.6)
Sound Level:	70 PSI 60 Cycles/Min 62.3 db(A)
Muffler:	Integral, Included



MODEL DESCRIPTION & ORDERING:

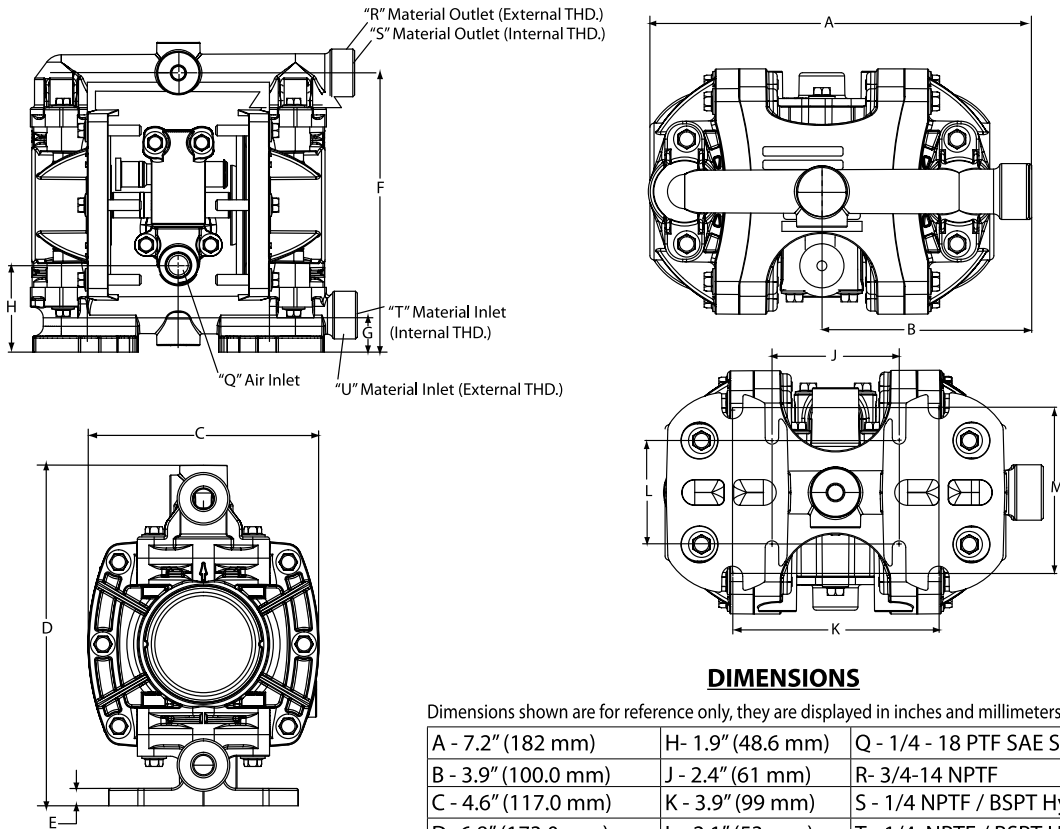
Position	1	2		3	4	5		6	7	8				
Example:	WB01	X	-	H	X	S	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Fluid Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB01- Standard Pump	E - Conductive Polypropylene P - Polypropylene	H - 1/4" NPT BSP hybrid	D - Groundable Acetal* E - Groundable Acetal* (Multiple port) K - Kynar PVDF L - Kynar PVDF (Multiple port) P - Polypropylene R - Polypropylene (Multiple port)	S - Stainless Steel	D - Acetal K - PVDF P - Polypropylene 0 - Polypropylene (Flex-Check spacer)* 1 - Acetal (Flex-Check spacer)* 2 - PVDF (Flex-Check spacer)*	A - Santoprene® C - Hytrel® G - Nitrile J - Nitrile (Flex-Check only) K - EPR (Flex-Check only) L - Viton® (Flex-Check only) N - Neoprene (Flex-Check only) T - PTFE	A - Santoprene® C - Hytrel® G - Nitrile T - PTFE

Hytrel® is a registered trademark of DuPont company, Santoprene® is registered trademark of Monsanto and Viton® is a registered trademark of ExxonMobil

1/4" WB NON-METALLIC Models MODEL: WB01P-HXS-XXX

DIMENSIONS:

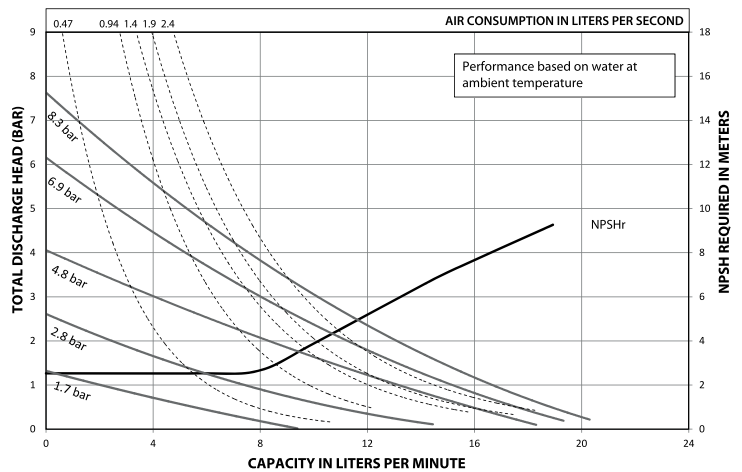
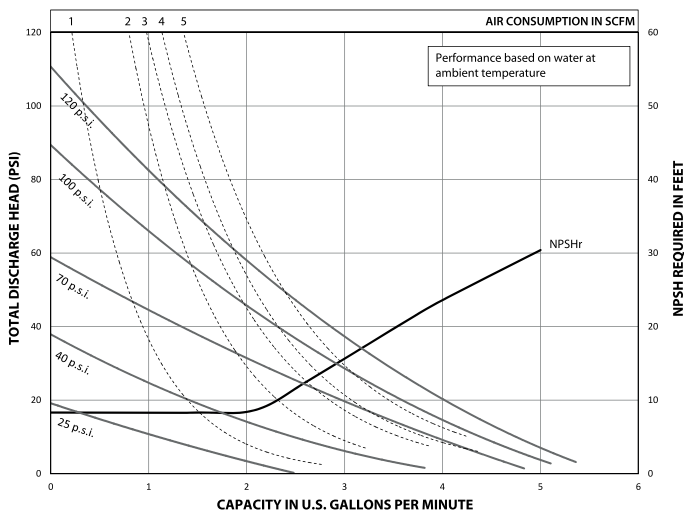


DIMENSIONS

Dimensions shown are for reference only, they are displayed in inches and millimeters (mm).

A - 7.2" (182 mm)	H - 1.9" (48.6 mm)	Q - 1/4 - 18 PTF SAE Short
B - 3.9" (100.0 mm)	J - 2.4" (61 mm)	R - 3/4-14 NPTF
C - 4.6" (117.0 mm)	K - 3.9" (99 mm)	S - 1/4 NPTF / BSPT Hybrid
D - 6.8" (173.0 mm)	L - 2.1" (53 mm)	T - 1/4 NPTF / BSPT Hybrid
E - 0.3" (8.8 mm)	M - 3.2" (81 mm)	U - 3/4-14 NPTF
F - 6.1" (156 mm)		V - 1/4 NPTF
G - 0.8" (20.7 mm)		

PERFORMANCE CURVE:



1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP

MODEL: WA05X-XXX

SPECIFICATION:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet: Rp1/2", Or 1/2" NPT

Fluid Inlet: Rp1/2", Or 1/2" NPT

Maximum Flow Rate: 13GPM(49.2LPM)

Max.Operating Pressure: 100psi(6.9bar)

Suspended Solids Max. Dia: 3/32"(2.4mm)

Weight: Polypropylene 7.2 lbs(3.3kg)

PVDF 9.5 Lbs(4.3kg)

Sound Level:70psi 60 cycles/min. 71.1db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA05	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
Base Mode	3-Polypropylene	0-Duckbill	1-Neoprene	1-Neoprene
	6-Groundable Acetal	2-Stainless Steel	2-Nitrile	2-Nitrile
	7-PVDF	3-Polypropylene	3-Viton	3-Viton
		4-PVDF	4-PTFE	4-PTFE/Santoprene
	J-Polypropylene *	6-Acetal	5-E.P.R.	5-E.P.R.
	H-Groundable Acetal*		8-Polyurethane	8-Polyurethane
	K-PVDF*		A-Stainless Steel	9-Hytrel
	* single piece manifold		E-Santoprene	B-Santoprene

ACCESSORIES:

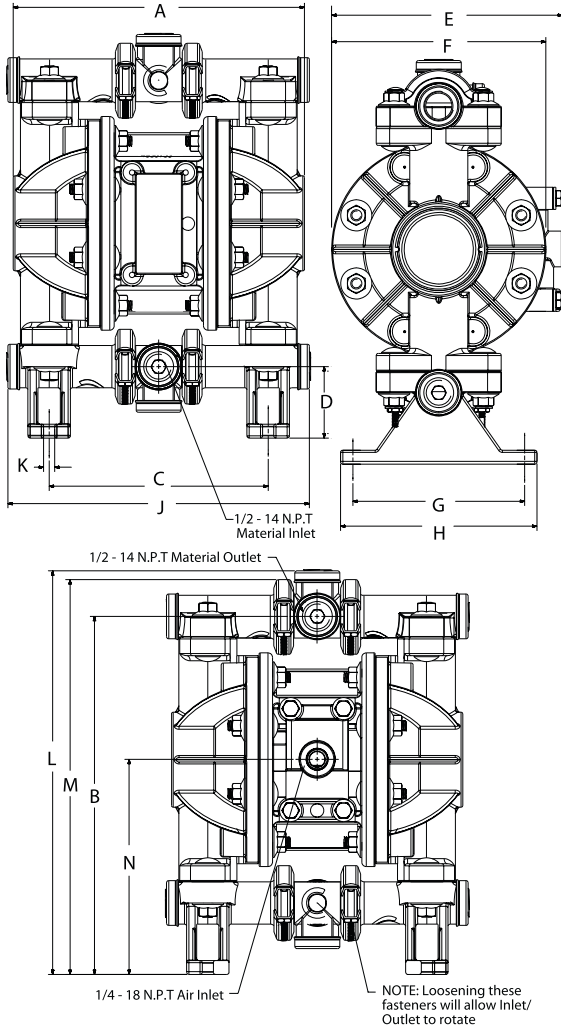
Service Repair Kit | WA637141(air section)
WA637140-XX(fluid section)

1/2" NON-METALLIC AIR OPERATED DOUBLE DIAPHRAGM PUMP MODEL: WA05X-XXX

DIMENSIONS:

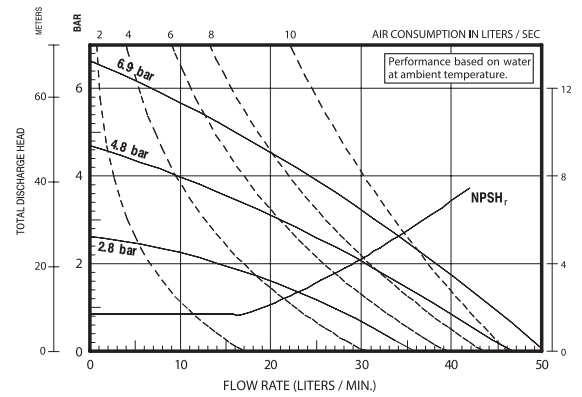
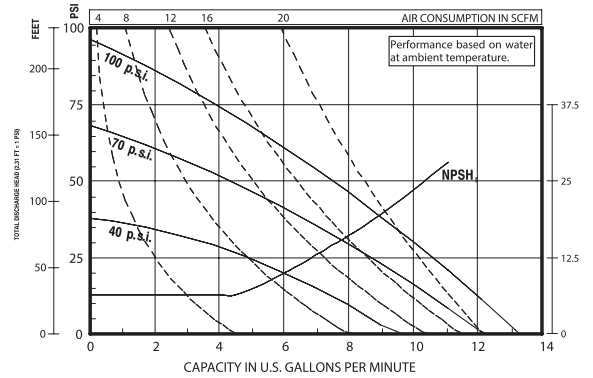
PERFORMANCE CURVE:

1/2 Non-Metallic Dimensions and Flow Charts



NOTE: Dimensions are shown in inches and (mm) and are supplied for reference only.

A - 8.155 (207.1 mm)	E - 6.467 (164 mm)	J - 8.44 5 (215 mm)
B - 10.051 (255 mm)	F - 6.000 (152 mm)	K - 0.31 2 (8 mm)
C - 6.135 (155.8 mm)	G - 4.812 (122.2 mm)	L - 11.331 (288 mm)
D - 2.005 (51 mm)	H - 5.500 (140 mm)	M - 11.08 4 (282 mm)
		N - 6.040 (153 mm)



1" WA NON-METALLIC Models

MODEL: WA1XX-XXX

SPECIFICATIONS:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet(female): Rp1", 1"NPT , Or 1" ANSI/DIN Flange

Fluid Inlet(female): Rp1", 1"NPT , Or 1" ANSI/DIN Flange

Maximum Flow Rate: 47GPM(177.9LPM)

Max. Operating Pressure: 120psi(8.3bar)

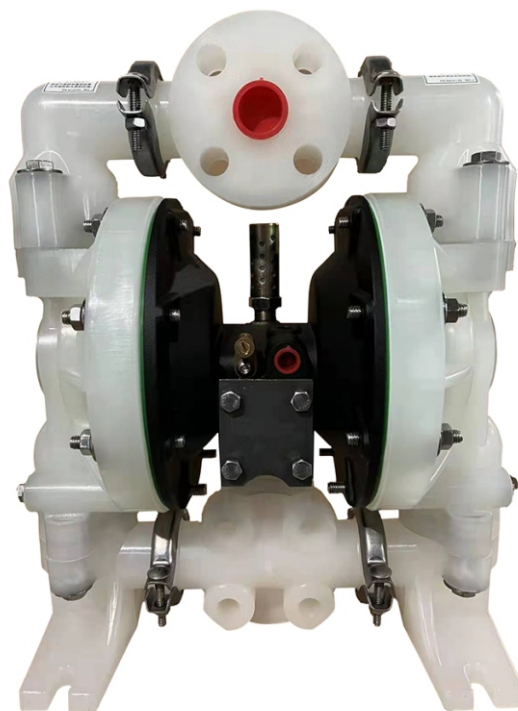
Suspended Solids Max. Dia.: 1/8"(3.2mm)

Maximum Dry Suction Lift: 15feet(4.6m)

Weight: polypropylene 20.3 lbs(9.2kg)

PVDF 26.2 lbs(11.9kg)

Sound Level:70psi 60 cycles/min. 64.5db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example:	WA1X	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
A - Aluminum B - Cast Iron	3 - Polypropylene Flange (3-piece manifold) 4- PVDF Flange (3-Piece manifold) F - Polypropylene Flange (one-piece manifold) J - Polypropylene N.P.T. threads (one piece manifold) L - Polypropylene BSP threads (one-piece manifold)	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 4 - PTFE 5 - E.P.R. 8 - Polyurethane A - 316 Stainless Steel C - Hytel E - Santoprene M - Medical Grade Santoprene	1 - Neoprene 2 - Nitrile 4-PTFE/Santoprene 5 - E.P.R. 6 - Composite PTFE M - Medical Grade B- Santoprene

ACCESSORIES:

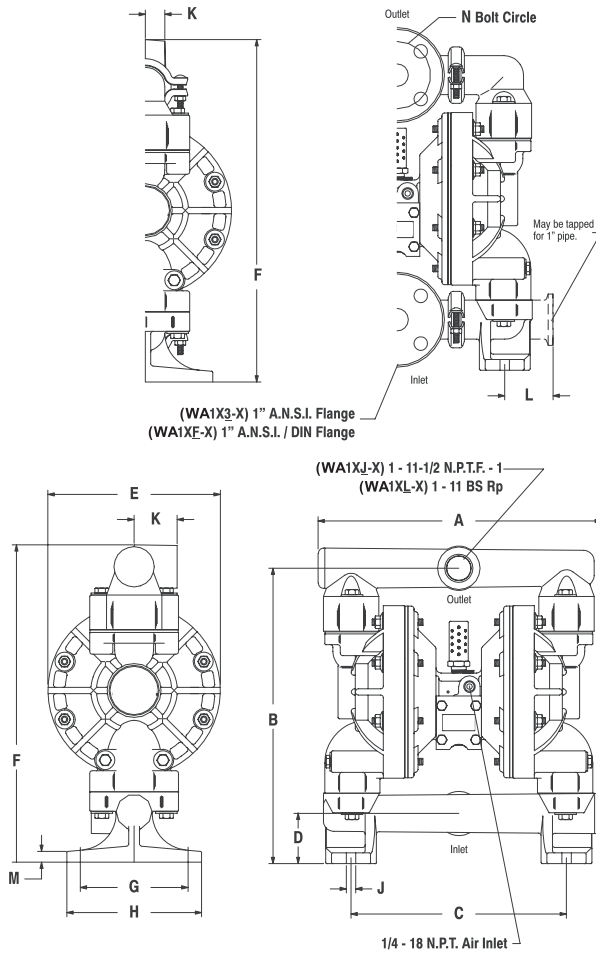
Service Repair Kit | WA637118-C(air section)

WA637161-XX-C(fluid section)

1" WA NON-METALLIC Models

MODEL: WA1XX-XXX

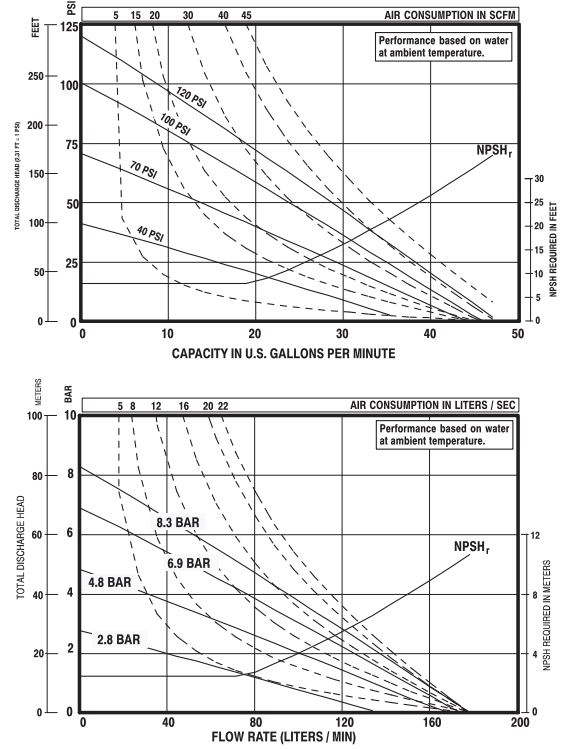
DIMENSIONS:



DIMENSIONS

	WA1X3-X	WA1XJ-X WA1XL-X	WA1XF-X
A	12-21/32" (321 mm)	13-5/32" (334 mm)	13-5/32" (334 mm)
B	13-25/32" (349 mm)	13-25/32" (350 mm)	13-25/32" (350 mm)
C	10-1/16" (255 mm)	10-1/16" (255 mm)	10-1/16" (255 mm)
D	2-3/8" (60 mm)	2-11/32" (59 mm)	2-11/32" (59 mm)
E	8-1/16" (204 mm)	8-1/16" (204 mm)	8-1/16" (204 mm)
F	16" (406 mm)	14-13/16" (376 mm)	16" (406 mm)
G	5-1/32" (128 mm)	5-1/32" (128 mm)	5-1/32" (128 mm)
H	6-9/32" (160 mm)	6-9/32" (160 mm)	6-9/32" (160 mm)
J	7/16" (11 mm)	7/16" (11 mm)	7/16" (11 mm)
K	15/16" (23 mm)	2" (51 mm)	1-1/32" (26 mm)
L	2-9/32" (57 mm)		
M	1/2" (13 mm)	1/2" (13 mm)	1/2" (13 mm)
N	3.140" (80 mm)		3.140" (80 mm)
	WA1XK-X WA1XN-X		

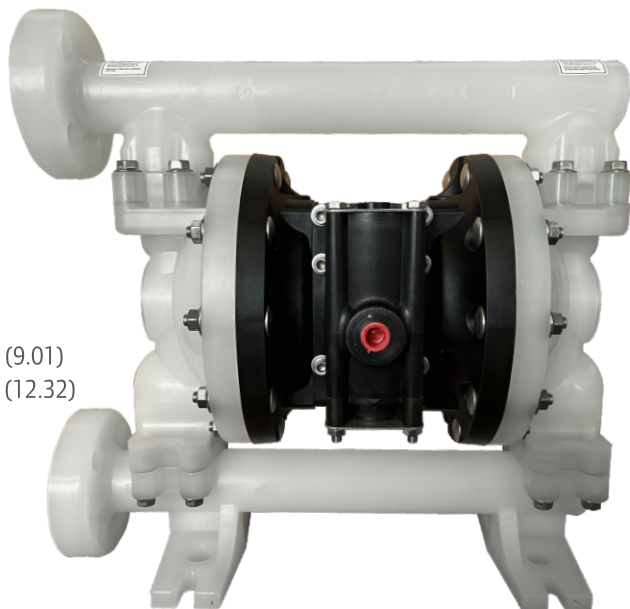
PERFORMANCE CURVE:



1" WB NON-METALLIC Models MODEL: WB10X-XXS-XXX

SPECIFICATION:

Ratio:	1:1		
Maximum GPM (LPM):	53 (200)		
Displacement per cycle Gallons (Liters):	0.226 (0.86)		
Air Inlet (Female):	1/4 - 18 N.P.T.		
Fluid Inlet/Outlet:	1" A.N.S.I./DIN flange		
Max. operating pressure psi (bar):	120 (8.3)		
Suspended solids max. dia. in.(mm):	1/8" (3.2)		
Weight lbs (kg):	Polypropylene, Side Ported	19.87 (9.01)	
	PVDF, Side Ported	27.15 (12.32)	
Maximum dry suction lift ft(m) :	19 (5.7)		
Sound Level:	70 PSI 60 Cycles/Min 79.7 db(A)		



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8			
Example:	WB10	X	-	X	X	S	-	X	X	X			

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material	
WB10 - Standard Pump	E - Conductive Polypropylene P - Polypropylene	F - 1" A.N.S.I./DIN Flange (Side)	E - Conductive Polypropylene* K - PVDF P - Polypropylene	S - SS	H - 440 SS (Hard) K - PVDF P - Polypropylene S - 316 SS	A - Santoprene® C - Hytrel® G - Nitrile T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna-N L - Long-Life PTFE M - Med. Grade Santoprene® T - PTFE/Santoprene® V - Viton®	

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Accessories

Service Repair Kits:

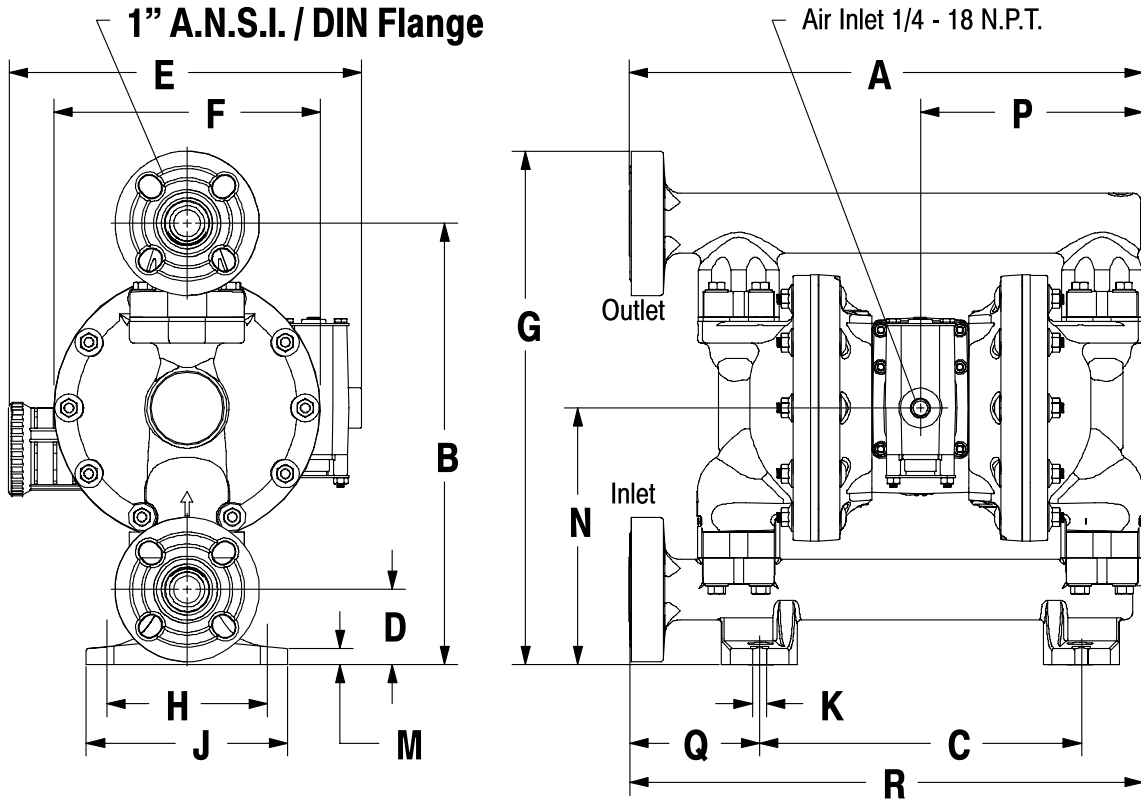
AIR MOTOR FOR WB10P: WB637397;

FLUID SECTION: WB637396-XX;

MAJOR AIR VALVE ASSEMBLY: WB637395-X;

1" WB NON-METALLIC Models MODEL: WB10X-XXS-XXX

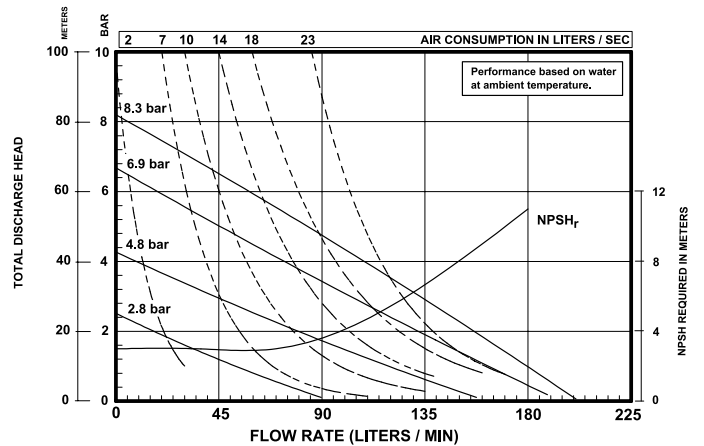
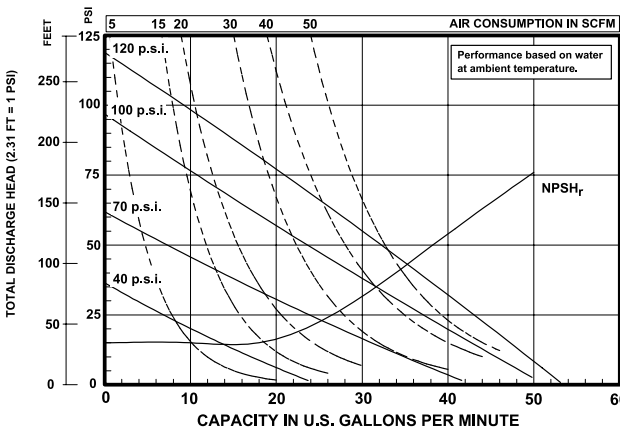
DIMENSIONS:



- E: 11-1/32"(279.5mm)
- F: 8-5/16"(211.1mm)
- B: 13-25/32"(349.8mm)
- D: 2-11/32"(59.4mm)
- M: 1/2"(12.7mm)
- H: 5-1/32"(127.6mm)
- J: 6-9/32"(159.6mm)

- A: 16-1/32"(407.3mm)
- P: 6-31/32"(176.6mm)
- G: 16-1/32"(407.3mm)
- N: 8-1/32"(203.4mm)
- K: 7/16"(11.1mm)
- Q: 4-1/16"(103mm)
- C: 10-1/16"(255.3mm)
- R: 16-1/32"(407.3mm)

PERFORMANCE CURVE:



1-1/2" WA NON-METALLIC Models

MODEL: WA1T3-XXX

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 1-1/2" ANSI/DIN Flange

Fluid Inlet(female): 1-1/2" ANSI/DIN Flange

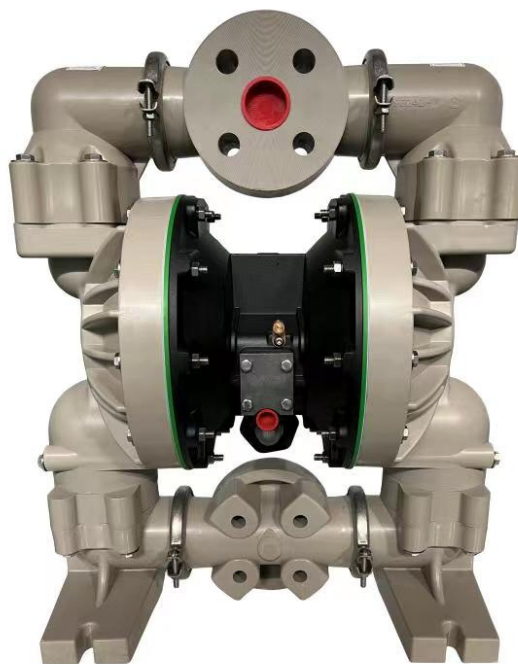
Maximum Flow Rate: 100GPM(378.5LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 14feet(4.27m)

Sound Level:70psi 60 cycles/min. 77.7db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA1X	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
T - Aluminum U - Cast Iron	3 - Polypropylene Flange (3-piece manifold) 4 - P.V.D.F (Kynar)	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) 8 - Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE 5 - E.P.R. 8 - Polyurethane C - Hytrel E - Santoprene	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE/Santoprene 5 - E.P.R. 6 - Composite PTFE 9 - Hytrel B - Santoprene

ACCESSORIES:

Service Repair Kit | WA637118-C(air section)

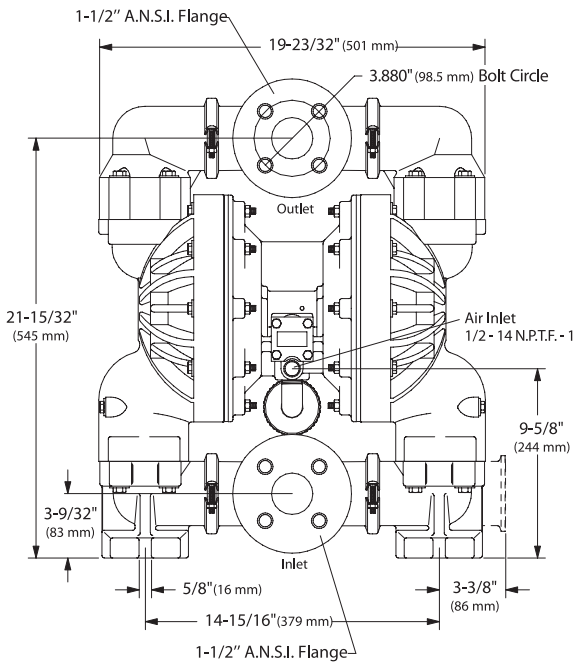
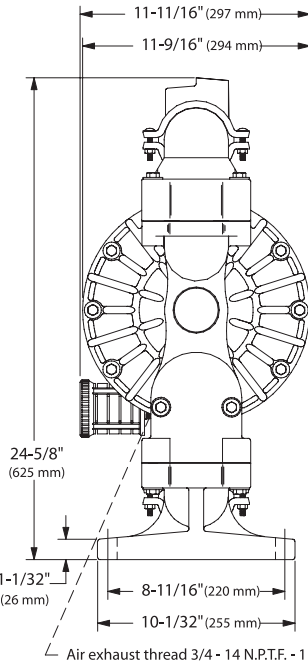
WA637165-XX-C(fluid section)

1-1/2" WA NON-METALLIC Models

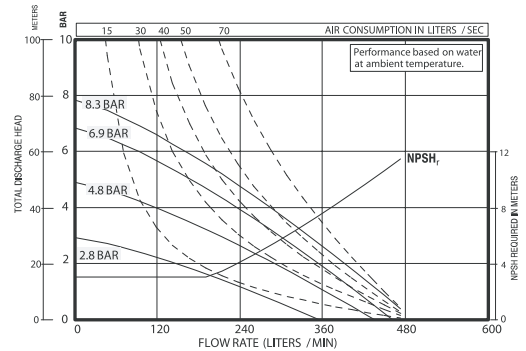
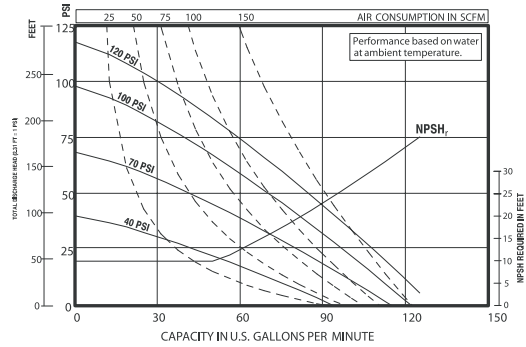
MODEL: WA1T3-XXX

DIMENSIONS:

All dimensions are given in inches and millimeters (mm).



PERFORMANCE CURVE:

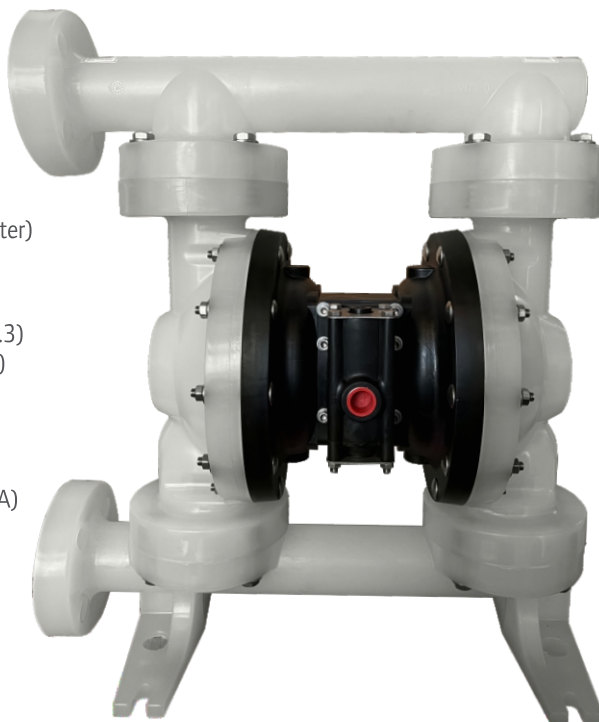


1-1/2" WB NON-METALLIC Models

MODEL: WB15X-XXS-XXX

SPECIFICATION:

Ratio:	1:1		
Maximum GPM (LPM):	123 (465)		
Displacement per cycle Gallons (Liters):	0.617 (2.34)		
Air Inlet (Female):	1/2 - 14 N.P.T.		
Fluid Inlet/Outlet:	1-1/2" A.N.S.I./DIN flange (side or center)		
Max. operating pressure psi (bar):	120 (8.3)		
Suspended solids max. dia. in. (mm):	1/4" (6.4)		
Weight lbs (kg):	Polypropylene, Side Ported	42.6	(19.3)
	PVDF, Side Ported	63.9	(29)
Maximum dry suction lift ft (m) :	14 (4.2)		
Sound Level:	70 PSI	60 Cycles / Min	81.0 db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8			
Example:	WB15	X	-	X	X	S	-	X	X	X	-		

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material	
WB15 - Standard Pump	E - Conductive Polypropylene P - Polypropylene	F - 1-1/2" A.N.S.I./DIN Flange (Side)	E - Conductive Polypropylene* K - PVDF P - Polypropylene	S - SS	H - 440 SS (Hard) K - PVDF P - Polypropylene S - 316 SS	A - Santoprene® C - Hytrel® G - Nitrile S - 316 SS T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna-N L - Long-Life PTFE M - Medical Grade Santoprene® T - PTFE/Santoprene® V - Viton®	

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Accessories

Service Repair Kits:

AIR MOTOR FOR WB15P: WB637389;

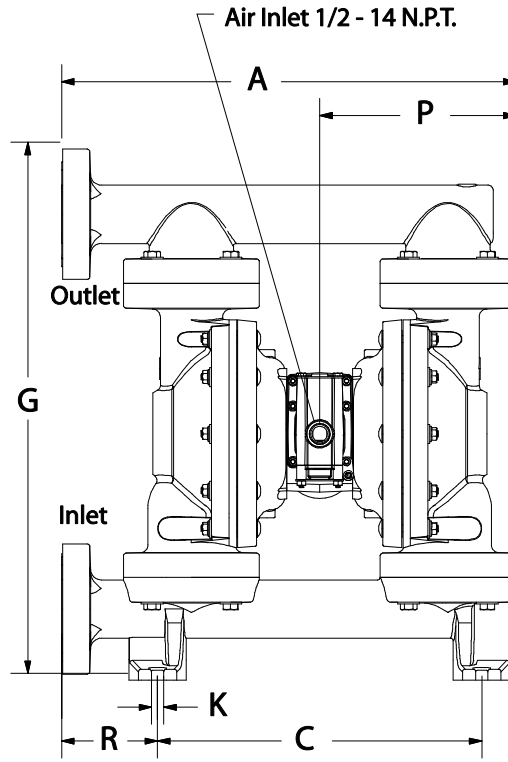
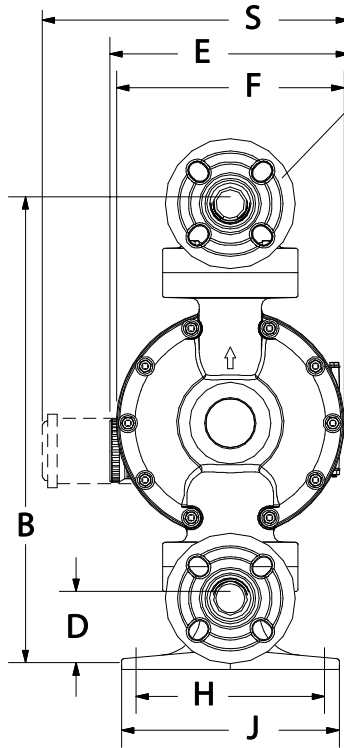
FLUID SECTION: WB637391-XX;

MAJOR AIR VALVE ASSEMBLY: WB637390-X;

1-1/2" WB NON-METALLIC Models MODEL: WB15X-XXS-XXX

DIMENSIONS:

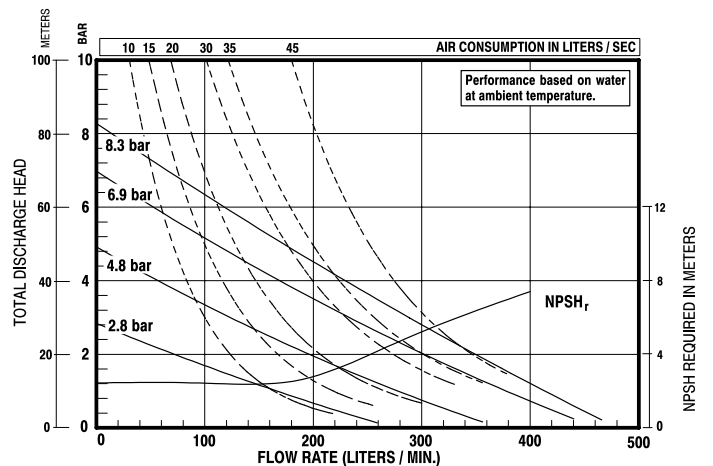
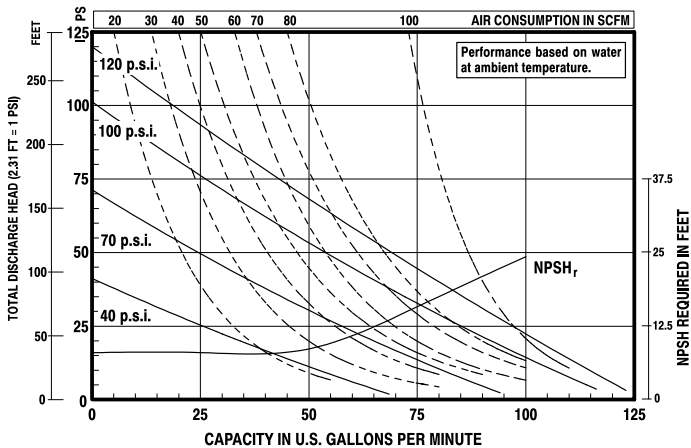
1-1/2" A.N.S.I. / DIN Flange



- S: 14-1/8" (358.5mm)
- E: 11" (279.5mm)
- F: 10-1/2" (266.3mm)
- D: 2-11/32" (59.4mm)
- B: 21-15/32" (545.3mm)
- D: 3-9/32" (83.3mm)
- H: 8-11/16" (220.7mm)
- J: 10-1/32" (254.8mm)

- A: 20-15/16" (531.6mm)
- P: 9-1/32" (229.5mm)
- G: 24-15/32" (621.5mm)
- K: 9/16" (14.3mm)
- R: 4-7/16" (112.4mm)
- C: 14-15/16" (379.4mm)

PERFORMANCE CURVE:



2" WA NON-METALLIC Models

MODEL: WA2A3-XXX

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 2" ANSI/DIN Flange

Fluid Inlet(female): 2" ANSI/DIN Flange

Maximum Flow Rate: 145GPM(548.8LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 14feet(4.27m)

Sound Level:70psi 60 cycles/min. 77.7db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA2X	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
A - Aluminum B - Cast Iron	3 - Polypropylene Flange (3-piece manifold) 4-P.V.D.F	2 - 316 Stainless Steel 3 - Polypropylene 4 - PVDF (Kynar) 8 - Hard 400 Stainless Steel	1 - Neoprene 2 - Nitrile 3 - Polypropylene 4 - PTFE 5 - E.P.R. 8 - Polyurethane C - Hytel E - Santoprene	1 - Neoprene 2 - Nitrile 3 - Viton 4 - PTFE/Santoprene 5 - E.P.R. 6 - Composite PTFE 9-Hytel B-Santoprene

ACCESSORIES:

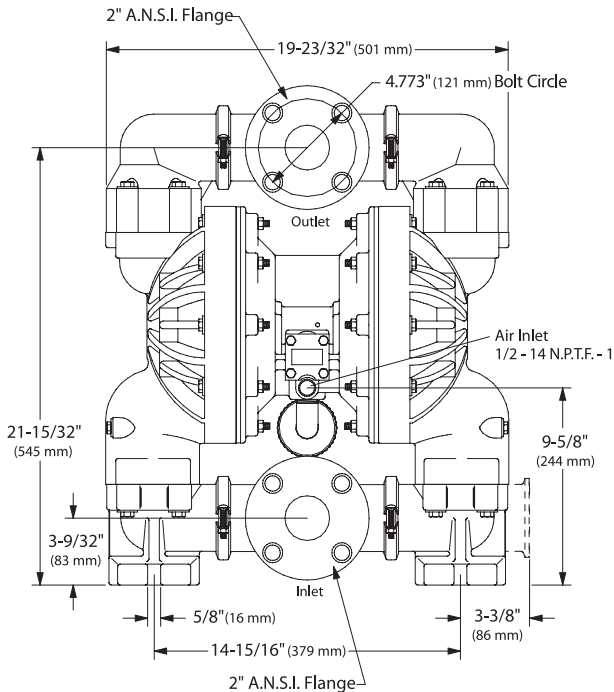
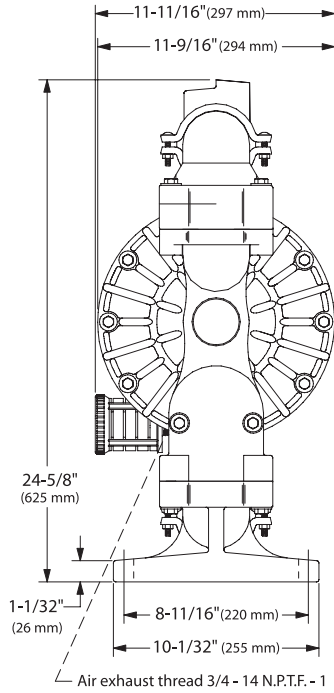
Service Repair Kit | WA637118-C(air section)

WA637165-XX-C(fluid section)

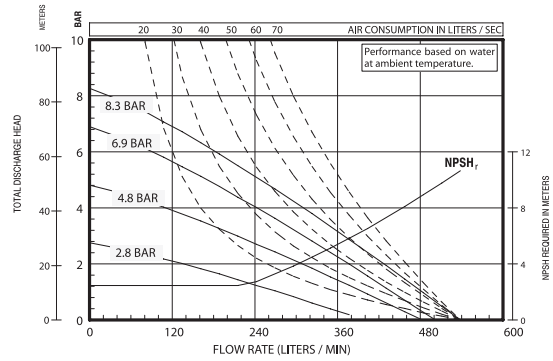
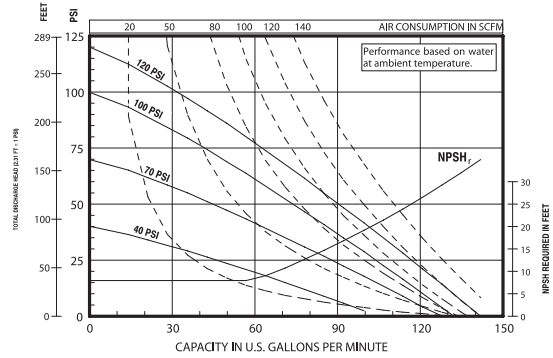
2" WA NON-METALLIC Models MODEL: WA2A3-XXX

DIMENSIONS:

All dimensions are given in inches and millimeters (mm).



PERFORMANCE CURVE:



2" WB NON-METALLIC Models

MODEL: WB20X-FXS-XXX

SPECIFICATIONS:

Ratio:	1:1
Maximum GPM (LPM):	184 (696)
Displacement per cycle Gallons (Liters):	1.4 (5.3)
Air Inlet (Female):	3/4 - 14 N.P.T.
Fluid Inlet/Outlet:	2" A.N.S.I./DIN flange (side)
Max. operating pressure psi (bar):	120 (8.3)
Suspended solids max. dia. in. (mm):	1/4" (6.4)
Weight lbs (kg):	Polypropylene 85.3 (38.7) PVDF 110.9 (50.3)
Maximum dry suction lift ft (m):	14 (4.2)
Sound Level:	70 PSI 60 Cycles/Min 85.0 db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8				
Example:	WB20	X	-	F	X	S	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB20 - Standard Pump	E - Conductive Polypropylene P - Polypropylene	F - 2" A.N.S.I./DIN Flange (Side)	E - Conductive Polypropylene* K - PVDF P - Polypropylene	S - SS	K - PVDF P - Polypropylene	A - Santoprene® C - Hytrel® G - Nitrile T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna- N L - Long-Life PTFE M - Medical Grade Santoprene® T - PTFE/ Santoprene® V - Viton®

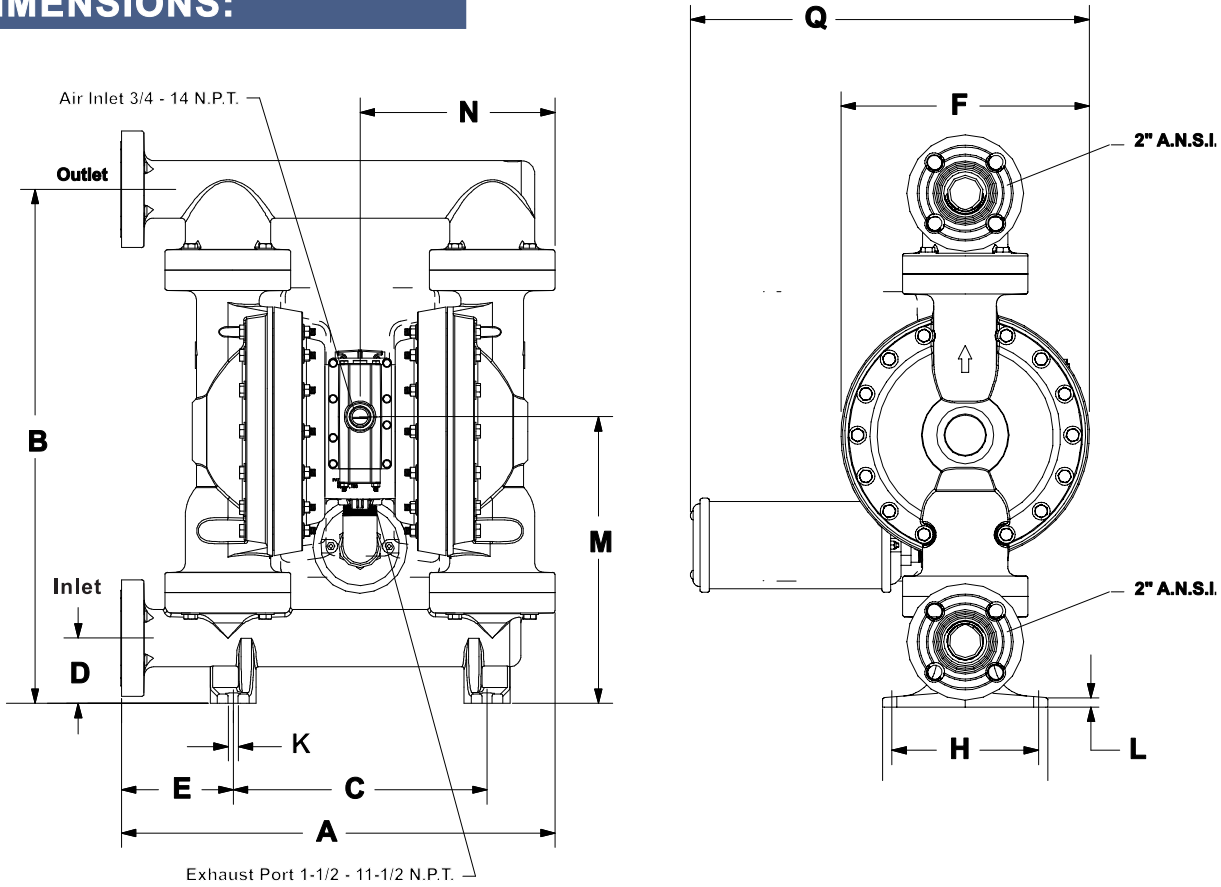
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▀ Accessories

- Service Repair Kits:**
AIR MOTOR FOR WB20P: WB637369;
FLUID SECTION: WB637373-XX;
MAJOR AIR VALVE ASSEMBLY: WB637374-X;

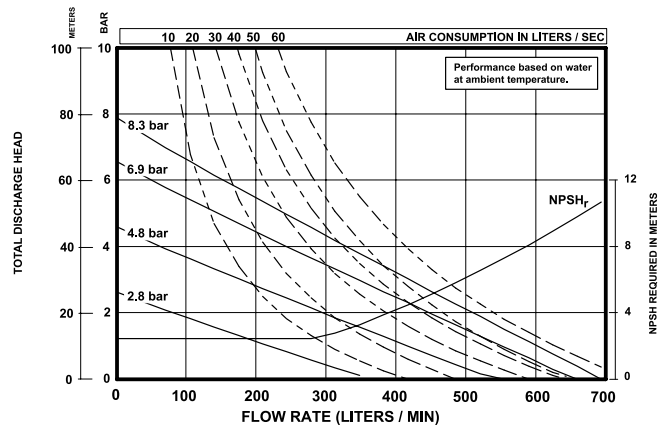
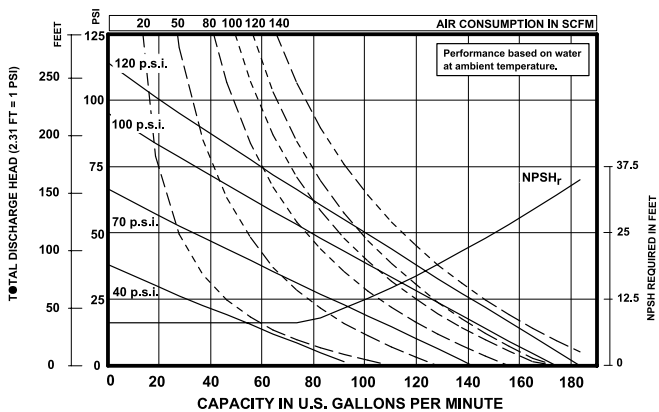
2" WB NON-METALLIC Models MODEL: WB20X-FXS-XXX

DIMENSIONS:



- A - 24-3/16" (614.3mm)
- B - 28-21/32" (728.0mm)
- C - 14-5/32" (360.0mm)
- D - 3-5/8" (92.2mm)
- E - 6-1/4" (158.3mm)
- F - 13-7/8" (352.0mm)
- G - 31-29/32" (810.5mm)
- H - 8-3/16" (207.8mm)
- J - 9-7/32" (234.2mm)
- K - 9/16" (14.3mm)
- L - 1/2" (12.7mm)
- M - 16" (405.9mm)
- N - 10-7/8" (276.2mm)
- Q - 22-9/32" (565.5mm)

PERFORMANCE CURVE:



3" WB NON-METALLIC Models MODEL: WB30P-XXS-XXX

SPECIFICATIONS:

Ratio	1:1
Maximum GPM (LPM):	285 GPM (1079 LPM)
Air Inlet:	3/4-14 NPT
Fluid Inlet / Outlet	3" DIN/ANSI Flange
Max. operating pressure psi (bar):	120 psi (8.3 Bar)
Suspended solids max. dia. in. (mm):	3/8" (9.5mm)
Weight lbs (kg):	Polypropylene 170 lbs (77.11 kg) PVDF 242 lbs (109.77 kg)
Maximum dry suction lift ft (m):	20.5 ft. (6.3m)
Sound Level:	70 PSI 60 Cycles/Min. 85.3 db(A)
Muffler Included:	67389



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8				
Example:	WB30	P	-	X	X	S	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB30- Standard Pump	P - Polypropylene	D - 3" ANSI 4-hole flange F - 3" DIN 8-hole flange	K - PVDF P - Polypropylene	S - SS	K - PVDF P - Polypropylene	A - Santoprene® C - Hytrel® G - Buna- N T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna- N L - Long-Life PTFE T - PTFE/Santoprene®

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Accessories

Service Repair Kits:

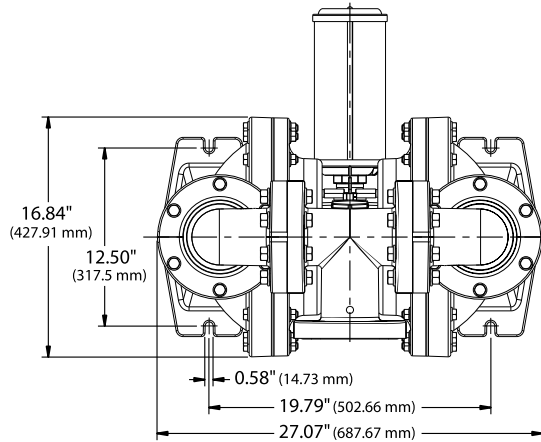
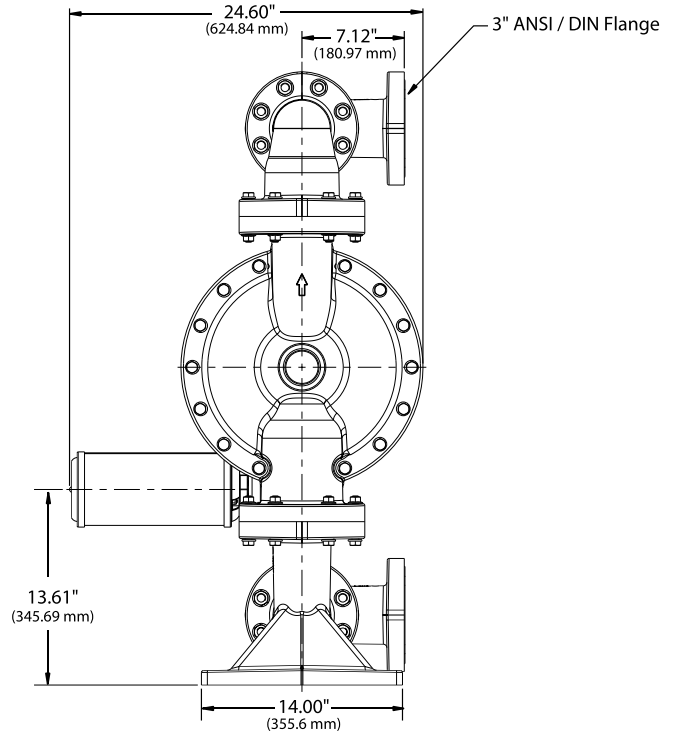
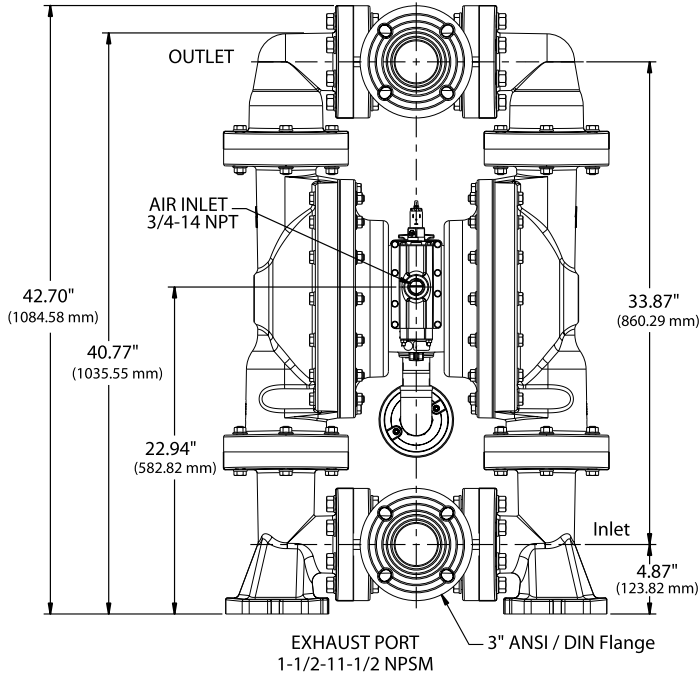
AIR MOTOR: WB637369;

FLUID SECTION: WB637447-XX;

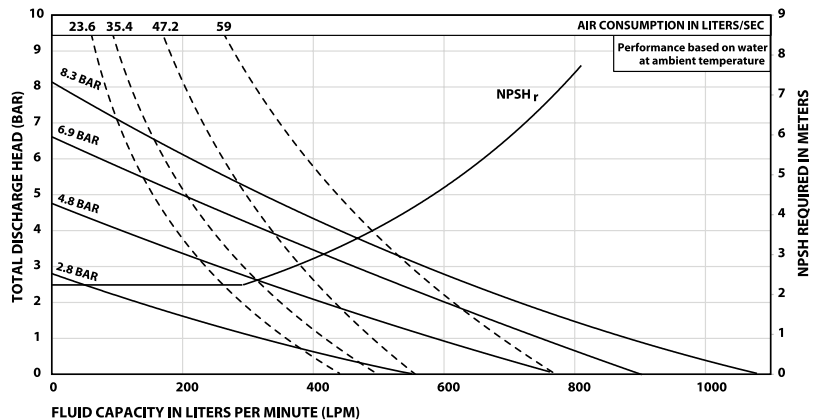
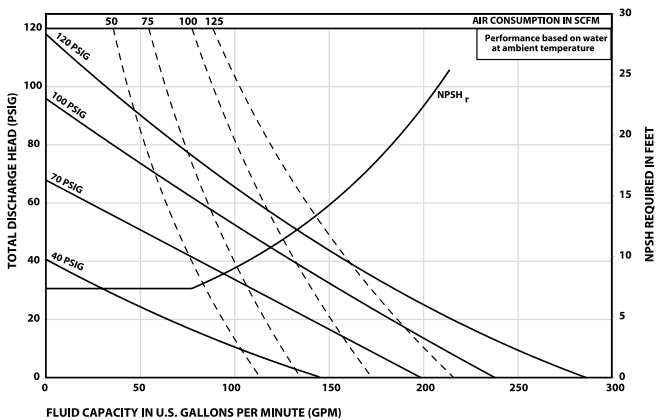
MAJOR AIR VALVE ASSEMBLY: WB637374;

3" WB NON-METALLIC Models MODEL: WB30P-XXS-XXX

DIMENSIONS:



PERFORMANCE CURVE:



Metallic Air Operated Double Diaphragm Pump Overview:

■ 1/2"

MODEL: WB05P-XXS-XXX



■ 1"

MODEL: WA1XX-XXX



■ 1"

MODEL: WB10X-XXX-XXX



■ 1-1/2"

MODEL: WA15X-XXX THRU WA18X-XXX



■ 1-1/2"

MODEL: WB15X-XXX-XXX



■ 2"

MODEL: WA25X-XXX and WA27X-XXX



■ 2"

MODEL: WB20X-XXX-XXX



■ 3"

MODEL: WA30X-XXX and WA32X-XXX



■ 3"

MODEL: WB30X-XXX-XXX



1/2" WB METALLIC Models MODEL: WB05P-XXS-XXX

SPECIFICATIONS:

Ratio: 1:1
 Maximum Flow: 13 g.p.m. (49.2 l.p.m.)
 Displacement per cycle: 0.040 Gallons (0.15 Liters)
 Air Inlet: (Female) 1/4 - 18 PT.F. SAE Short

Fluid Inlet/Outlet: 1/2 - 14 N.P.T.F. - 1
 Rp 1/2 (1/2 - 14 BSP, parallel)

Max. operating pressure: 100-psi (6.9-bar)
 Suspended solids max. dia.: 3/32-in. (2.4-mm)

Weight: lbs (kg)
 WB05P-XAS-XXX 8.36 (3.8)
 WB05P-XSS-XXX 14.6(6.6)

Maximum dry suction lift: ft (m) 15 (4.5)
 Sound Level: 70 PSI 60 Cycles/Min 71.1 db(A)



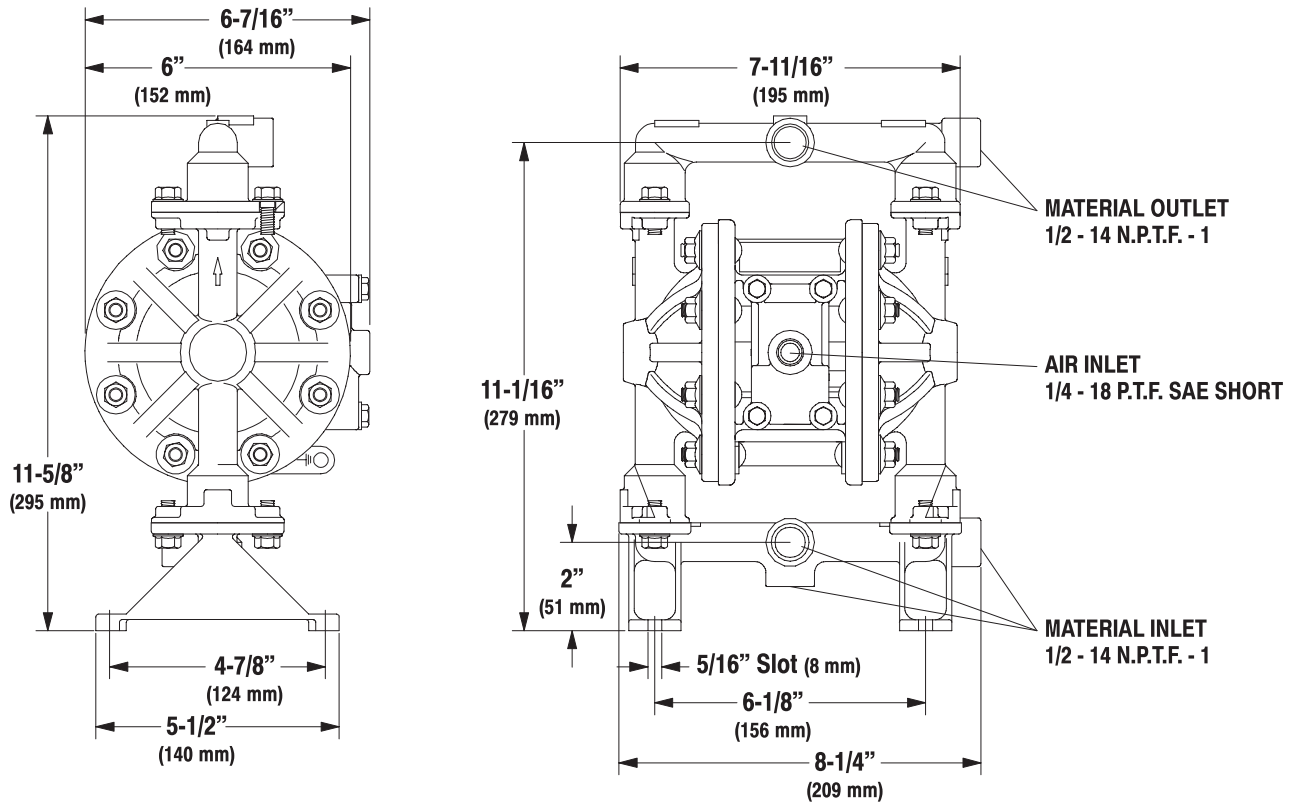
MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8	
Example:	WB05	P	-	X	X	S	-	X	X	X	-

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Manifold Material	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB05	P - Polypropylene	A - 1/2 - 14 N.P.T.F. - 1 B - Rp 1/2 (1/2 - 14 BSP, parallel)	A - Aluminum S - Stainless Steel	S - Stainless Steel	F - Aluminum P - Polypropylene S - Stainless Steel 316	A - Santoprene G - Nitrile S - Stainless Steel T - PTFE V - Viton	A - Santoprene G - Nitrile T - PTFE/Santoprene V - Viton

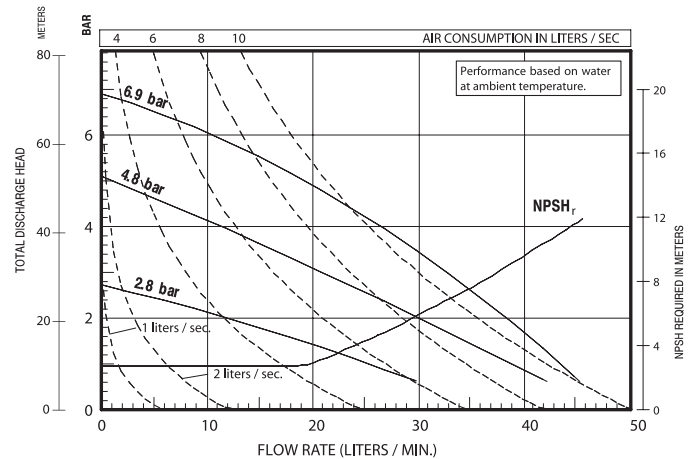
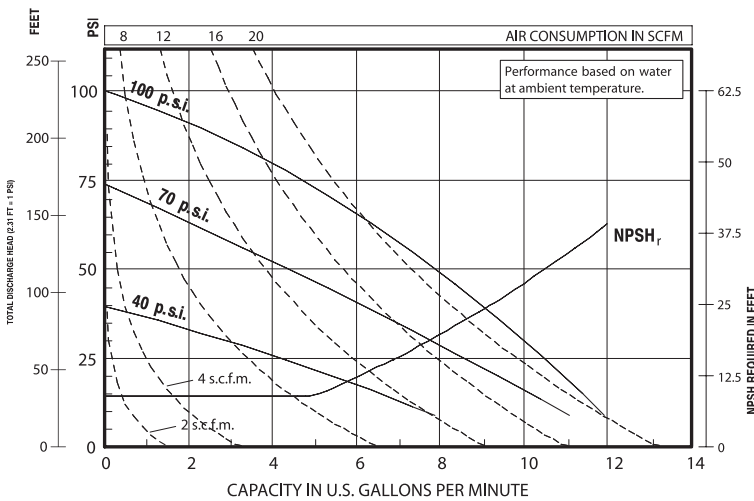
1/2" WB METALLIC Models MODEL: WB05P-XXS-XXX

DIMENSIONS:



Dimensions shown are for reference only, they are shown in inches and millimeters (mm).

PERFORMANCE CURVE:



1" WA METALLIC Models

MODEL: WA1XX-XXX

SPECIFICATIONS:

Air Inlet(female): 1/4"BSPT(1/4"NPT Available On Request)

Fluid Outlet(female): 1"BSPT Or 1"NPT

Fluid Inlet(female): 1"BSPT Or 1"NPT

Maximum Flow Rate: 35GPM(133LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 20feet(6.1m)

Weight:WA100-X-C(aluminum)19 lbs(8.6kg)

WA101-X-C(stainless steel)36 lbs(16.3kg)

WA102-X-C(Cast Iron)31 lbs(14.1kg)

Displacement Per Cycle: 0.16Gallons(0.60Liters)

Sound Level:70psi 50 cycles/min. 81.0db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA1X	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Manifold Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
0-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum	1-Neoprene	1-Neoprene
1-Cast Iron, NPT	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
2-Aluminum,BSP	2-Cast Iron(steel hardware)	3-Polypropylene	3-Viton	3-Viton
3-Cast Iron,BSP	9-SS,dual outlet(steel hardware)	4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum(stainless)	5-Carbon Steel	5-E.P.R.	5-E.P.R.
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	6-Acetal	6-Acetal
	C-Cast Iron(stainless)		8-Polyurethane	9-Hytrel
	D-SS,dual outlet(stainless hardware)		A-Stainless Steel	B-Santoprene
			C-Hytrel	
			E-Santoprene	

ACCESSORIES:

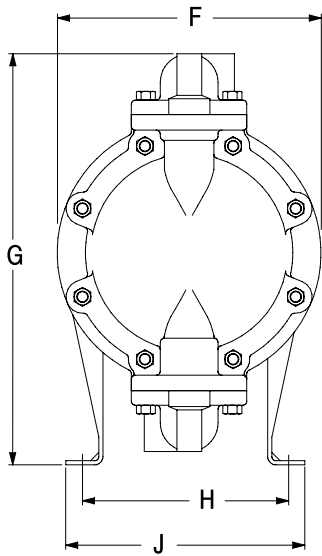
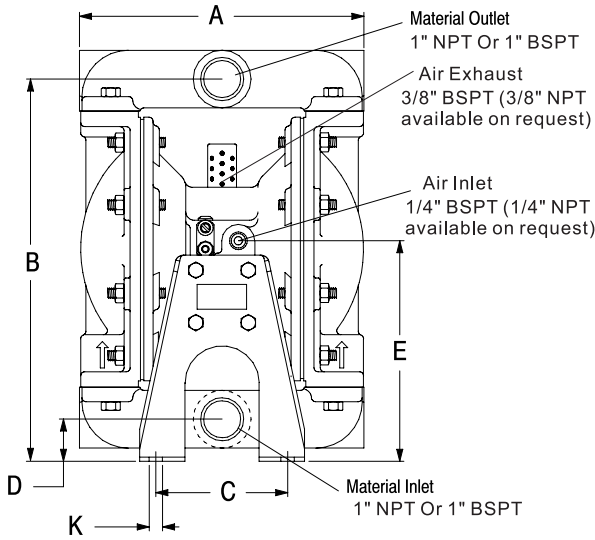
Service Repair Kit | WA637118-C(air section)

WA637119-XX-C(fluid section)

1" WA METALLIC Models

MODEL: WA1XX-XXX

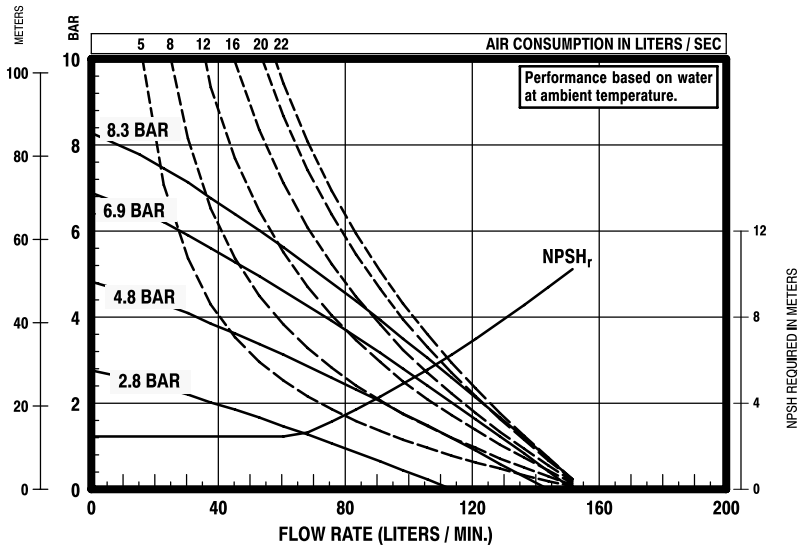
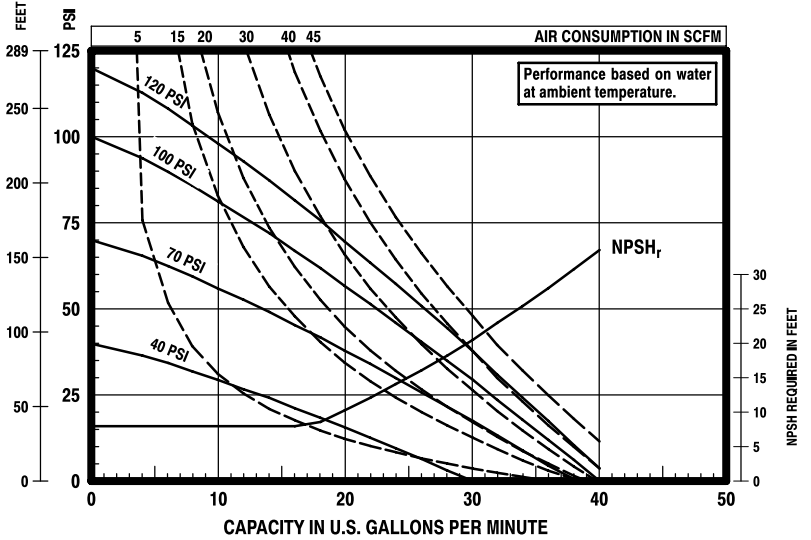
DIMENSIONS:



DIMENSIONS

A	8-9/16" (217 mm)	E	6-1/2" (165 mm)	H	6-1/4" (159 mm)
B	11-9/16" (294 mm)	F	8" (203 mm)	J	7-5/16" (186 mm)
C	4" (102 mm)	G	12-1/2" (318 mm)	K	7/16" (11 mm)
D	1-1/4" (32 mm)				

PERFORMANCE CURVE:



NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

1" WB METALLIC Models MODEL: WB10X-XXX-XXX

SPECIFICATIONS:

Ratio:	1:1
Maximum GPM (LPM):	52 (197)
Displacement per cycle Gallons (Liters):	0.232 (0.88)
Air Inlet (Female):	1/4 - 18 N.P.T.
Fluid Inlet/Outlet:	1 - 1 1/2 N.P.T.F.-1, Rp1(1-11 BSP)
Max. operating pressure psi (bar):	120 (8.3)
Suspended solids max. dia. in. (mm):	1/8" (3.3)
Weight lbs (kg):	PX10R-XAX-XXX 20.7 (9.4)
	PX10R-XCX-XXX 35.2 (16.0)
	PX10R-XHX-XXX 39.6 (18.0)
	PX10R-ASX-XXX, 38.2 (17.3)
	PX10R-BSX-XXX
	PX10R-FSX-XXX 43.9 (19.9)
	Note: Add 4.65 lbs (2.11 kg) for aluminum air motor
	Add 11.09 lbs (5.03 kg) for stainless steel air motor
Maximum dry suction lift ft(m):	19 (5.7)
Sound Level:	70 PSI 60 Cycles/Min 80.6 db



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8				
Example:	WB10	X	-	X	X	X	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB10- Standard Pump	A - Aluminum* R - Polypropylene S - Stainless Steel*	A - NPTF Thread B - BSP Thread F - 1" ANSI/DIN Hybrid End Flange with Flat Face	A - Aluminum* C - Cast Iron H - Hastelloy-C* S - Stainless Steel*	P - Plated Steel S - SS	A - Santoprene® C - Hytrel® E - Carbon Steel F - Aluminum G - Nitrile H - 440 SS L - Hastelloy-C S - 316 SS	A - Santoprene® C - Hytrel® G - Nitrile S - 316 SS T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna- N L - Long-Life PTFE T - PTFE/ Santoprene® V - Viton®

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Accessories

Service Repair Kits:

AIR SECTION: WB637397;

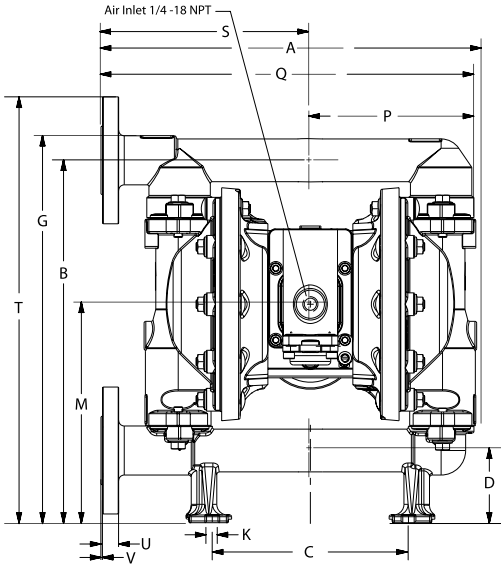
FLUID SECTION: WB637401-XXX(with seats);

MAJOR AIR VALVE ASSEMBLY: WB637395-X;

1" WB METALLIC Models

MODEL: WB10X-XXX-XXX

DIMENSIONS:



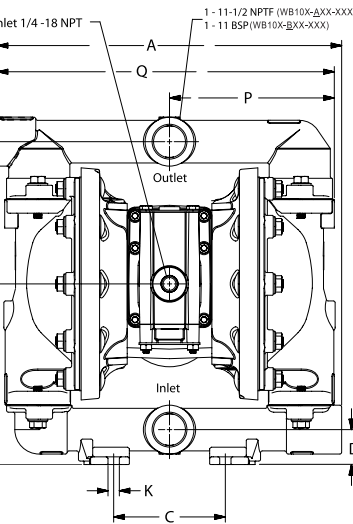
WB10X-FSX-XXX

- A - 12.34" (313.4 mm)
- B - 11.56" (293.6 mm)
- C - 4" (101.6 mm)
- D - 1.25" (31.7 mm)

- WB10A-XXX-XXX
- WB10R-XXX-XXX
- WB10S-XXX-XXX

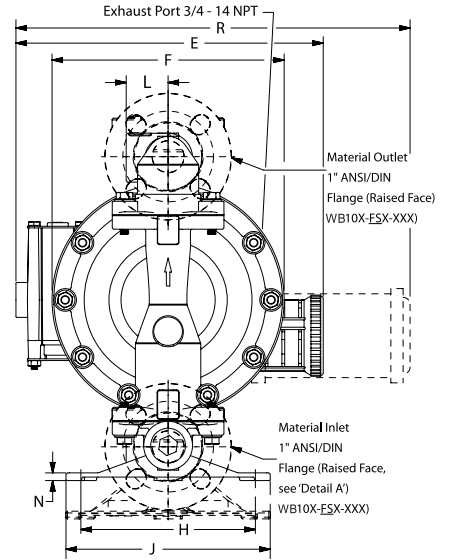
- E - see below
- F - see below
- G - 12.43" (315.7 mm)
- H - 6.25" (158.7 mm)

- "E"
- 11.09" (281.6 mm)
-



- J - 7.31" (185.6 mm)
- K - 0.4" (10.1 mm)
- L - 1.5" (38.1 mm)
- M - 6.46" (164.0 mm)
- "F"
- 8.12" (206.2 mm)
- 8.31" (211.0 mm)
- 8.18" (207.7 mm)

- N - see below
- P - 5.84" (148.3 mm)
- Q - 12" (304.8 mm)
- R - see below
- "R"
- 14.03" (356.3 mm)
-
- 13.84" (351.5 mm)



WB10X-FSX-XXX

- A - 13.37" (339.5 mm)
- B - 12.92" (328.1 mm)
- C - 7" (177.8 mm)

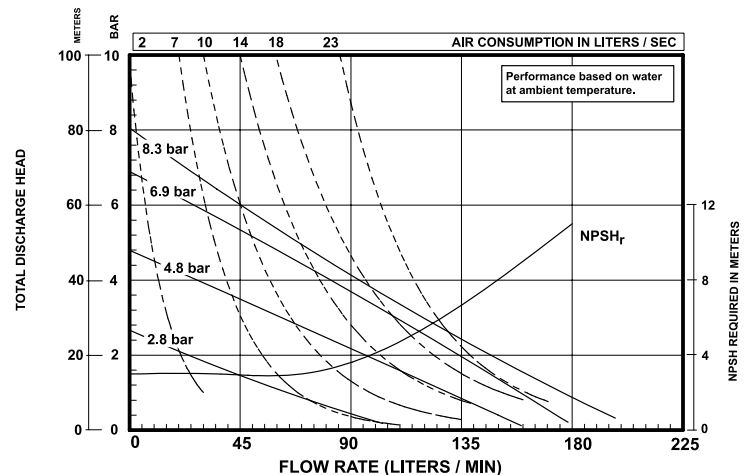
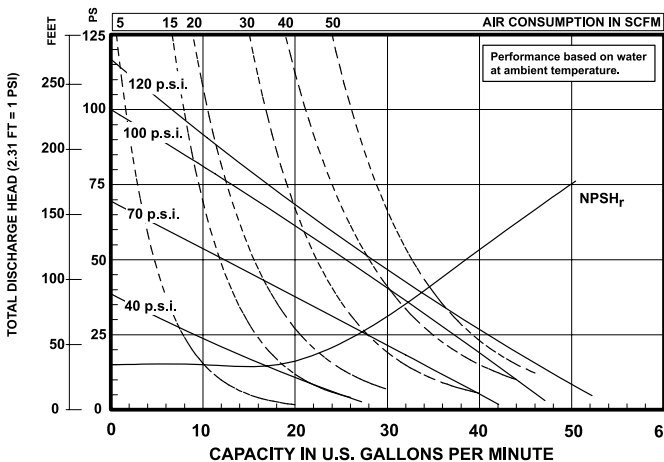
- D - 2.57" (65.2 mm)
- G - 13.80" (350.5 mm)
- K - 0.4" (10.1 mm)

- M - 7.79" (197.8 mm)
- N - 9/32" (7.1 mm)
- P - 5.83" (148.0 mm)

- Q - 13.30" (337.8 mm)
- R - 13.83" (351.2 mm)

- "N"
- WB10X-XAX-XXX 0.25" (6.3 mm)
- WB10X-XCX-XXX 0.28" (7.1 mm)
- WB10X-XHX-XXX 0.28" (7.1 mm)
- WB10X-XSX-XXX 0.28" (7.1 mm)

PERFORMANCE CURVE:



1-1/2" WA METALLIC Models

MODEL: WA15X-XXX THRU WA18X-XXX

SPECIFICATIONS:

Air Inlet(female): 1/2"BSPT(1/2"NPT Available On Request)

Fluid Outlet(female): 1-1/2"BSPT Or 1-1/2"NPT

Fluid Inlet(female): 1-1/2"BSPT Or 1-1/2"NPT

Maximum Flow Rate: 90GPM(340.7LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 1/4"(6.4mm)

Maximum Dry Suction Lift: 19feet(5.8m)

Weight:WA150-X-C(aluminum)51.5 lbs(23.4kg)

WA151-X-C(stainless steel)84.5 lbs(38.3kg)

WA152-X-C(Cast Iron)79.5 lbs(36.1kg)

Displacement Per Cycle: 0.64Gallons(2.42Liters)

Sound Level:70psi 60 cycles/min. 80.5db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA1X	X	-	X	X	X		

Position 1 Center Body	Position 2 Fluid Caps Maniflod Mat.	Position 3 Seat Material	Position 4 Ball Check Material	Position 5 Diaphragm Material
5-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum	1-Neoprene	1-Neoprene
6-Cast Iron, NPT	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
7-Aluminum,BSP	2-Cast Iron(steel hardware)	3-Polypropylene	3-Viton	3-Viton
8-Cast Iron,BSP		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	5-E.P.R.	5-E.P.R.
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	6-Acetal	6-Acetal
	C-Cast Iron(stainless)		8-Polyurethane	9-Hytrel
			A-Stainless Steel	B-Santoprene
			C-Hytrel	
			E-Santoprene	

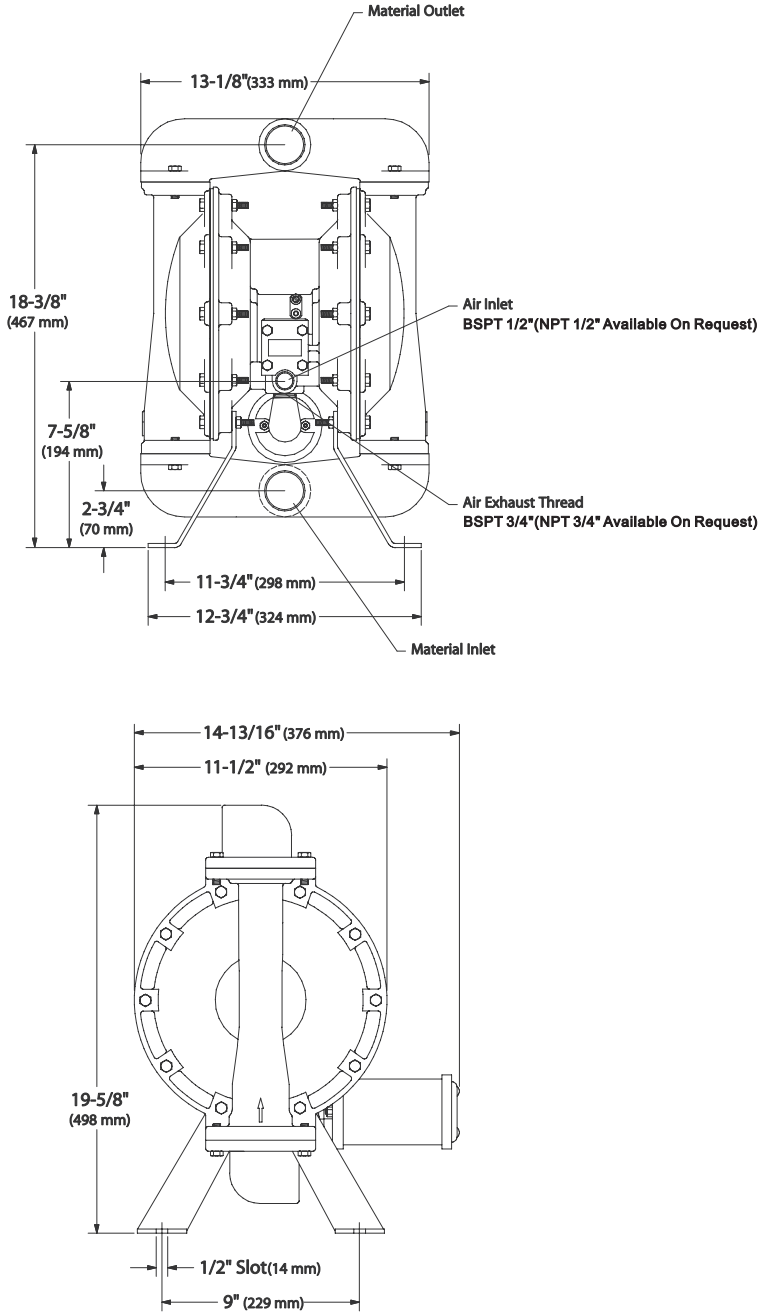
ACCESSORIES:

Service Repair Kit | WA637118-C(air section)
WA637124-XX(fluid section)

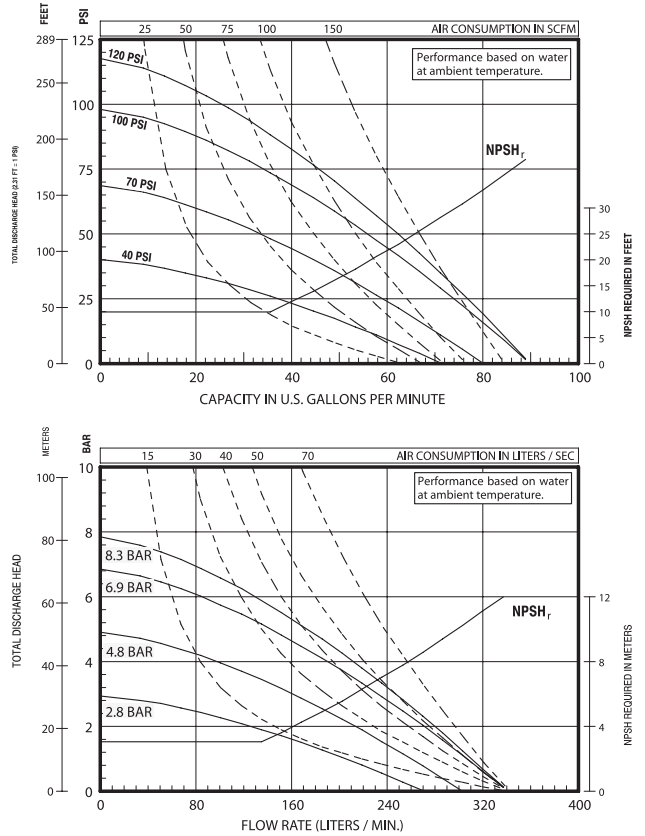
1-1/2" WA METALLIC Models

MODEL: WA15X-XXX THRU WA18X-XXX

DIMENSIONS:



PERFORMANCE CURVE:



1-1/2" WB METALLIC Models MODEL: WB15X-XXX-XXX

SPECIFICATIONS:

Ratio:	1:1
Maximum GPM (LPM):	123 (466)
Displacement per cycle Gallons (Liters):	0.617 (2.34)
Air Inlet (Female):	1/2 - 14 N.P.T.
Fluid Inlet/Outlet:	1-1/2" - 11-1/2 N.P.T.F.-1, Rp1-1/2(1-1/2-11BSP) 1-1/2" ANSI/DIN hybrid flange
Max. operating pressure psi (bar):	120 (8.3)
Suspended solids max. dia. in.(mm):	1/4" (6.4)
Weight lbs (kg):	WB15R-XAX-XXX 37.7 (17.1) WB15R-XCX-XXX 73.2 (33.2) WB15R-XSX-XXX 61.2 (27.8) WB15R-XHX-XXX 86.9 (39.4)
	Note: add 2.14 lbs (0.97 kg) for aluminum air motor section add 18.14 lbs (8.23 kg) for stainless steel air motor section
Maximum dry suction lift ft(m):	14 (4.2)
Sound Level:	70 PSI 50 Cycles/Min 81.0 db(A)
Muffler Included:	350-568



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8				
Example:	WB15	X	-	X	X	X	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB15 - Standard Pump	A - Aluminum* R - Polypropylene S - Stainless Steel*	A - NPTF Thread B - BSP Thread	A - Aluminum* C - Cast Iron S - Stainless Steel*	P - Plated Steel S - Stainless Steel	A - Santoprene® C - Hytrel® E - Carbon Steel F - Aluminum G - Nitrile H - 440 Stainless Steel L - Hastelloy-C S - 316 Stainless Steel	A - Santoprene® C - Hytrel® G - Nitrile S - 316 SS T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna-N L - Long-Life PTFE T - PTFE/Santoprene® V - Viton®

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Accessories

Service Repair Kits:

AIR SECTION: WB637389;

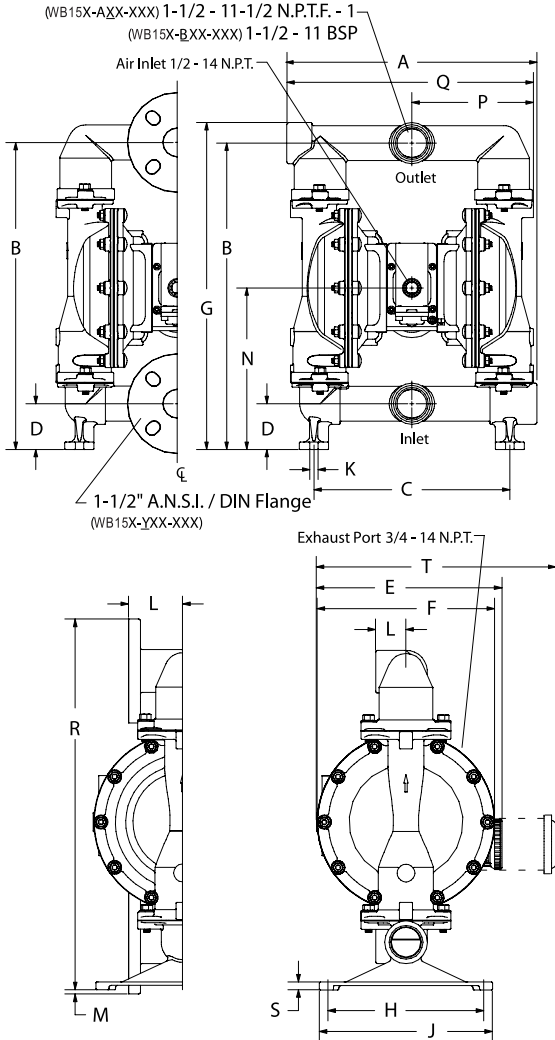
FLUID SECTION: WB637375-XXX(with seats);

MAJOR AIR VALVE ASSEMBLY: WB637390-X;

1-1/2" WB METALLIC Models

MODEL: WB15X-XXX-XXX

DIMENSIONS:



- A - see below
- B - 18-3/8" (466.7 mm)
- C - 11-3/4" (298.5 mm)
- D - 2-3/4" (69.9 mm)
- E - see below
- F - 10-1/4" (260.4 mm)
- G - 19-5/8" (498.1 mm)
- H - 9" (228.6 mm)
- J - 10" (254.0 mm)
- K - 1/2" (12.7 mm)
- L - see below
- M - 1/4" (6.4 mm)
- N - 9-11/16" (246.0 mm)
- P - see below
- Q - see below
- R - 21-7/16" (543.9 mm)
- S - see below
- T - see below

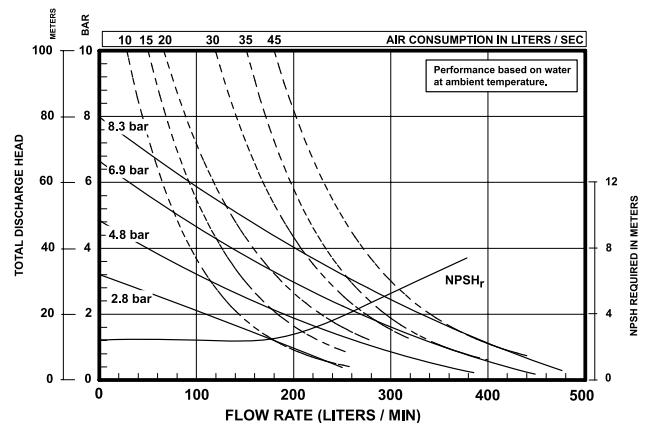
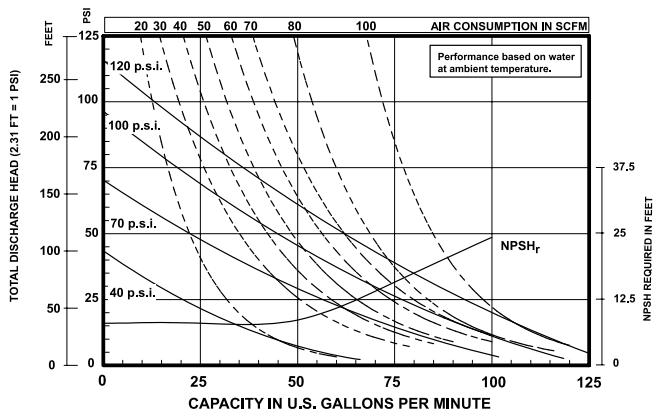
	"A"	"L"
WB15 X- <u>A</u> X-XXX	14-7/8" (377.8 mm)	1-3/4" (44.5 mm)
WB15 X- <u>C</u> X-XXX	14-5/8" (371.5 mm)	1-3/4" (44.5 mm)
WB15 X- <u>H</u> X-XXX	14-9/16" (370.0 mm)	3-1/8" (79.4 mm)
WB15 X- <u>A</u> S X-XXX, - <u>B</u> S X	14-25/32" (375.5 mm)	1-3/4" (44.5 mm)
WB15 X- <u>Y</u> S X-XXX	14-9/16" (370.0 mm)	3-1/8" (79.4 mm)

	"E"	"T"
WB15 <u>A</u> -XXX-XXX	-----	14-1/32" (356.2 mm)
WB15 <u>R</u> -XXX-XXX	11-3/32" (281.3 mm)	-----
WB15 <u>S</u> -XXX-XXX	-----	13-27/32" (351.4 mm)

	"P"	"Q"	"S"
7-7/32" (183.4 mm)	14-23/32" (373.9 mm)	1/2" (12.7 mm)	
7-3/16" (182.6 mm)	14-1/2" (368.3 mm)	1/4" (6.4 mm)	
7-3/16" (182.6 mm)	14-1/2" (368.3 mm)	1/4" (6.4 mm)	
7-9/32" (185.0 mm)	14-13/16" (375.5 mm)	15/32" (11.4 mm)	
7-9/32" (185.0 mm)	14-9/16" (370.0 mm)	15/32" (11.4 mm)	

	"E"	"T"
WB15 <u>A</u> -XXX-XXX	-----	14-1/32" (356.2 mm)
WB15 <u>R</u> -XXX-XXX	11-3/32" (281.3 mm)	-----
WB15 <u>S</u> -XXX-XXX	-----	13-27/32" (351.4 mm)

PERFORMANCE CURVE:



2" WA METALLIC Models

MODEL: WA25X-XXX and WA27X-XXX

SPECIFICATIONS:

- Air Inlet(female):** 3/4"BSPT(3/4"NPT Available On Request)
- Fluid Outlet(female):** 2"BSPT Or 2"NPT
- Fluid Inlet(female):** 2"BSPT Or 2"NPT
- Maximum Flow Rate:** 172GPM(651LPM)
- Max. Operating Pressure:** 120psi(8.3bar)
- Suspended Solids Max. Dia.:** 1/4"(6.4mm)
- Maximum Dry Suction Lift:** 27.2feet(8.3m)
- Weight:**WA2X0-XXX-C 65.2 lbs(29.6kg)
 WA2X1-XXX-C 129.9 lbs(58.9kg)
 WA2X2-XXX-C 124.3 lbs(56.38kg)
- Displacement Per Cycle:** 1.4Gallons(5.3Liters)
- Sound Level:**70psi 60 cycles/min. 85.3db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA2X	X	-	X	X	X		

Position 1	Position 2	Position 3	Position 4	Position 5
Center Body	Fluid Caps Manifold Mat.	Seat Material	Ball Check Material	Diaphragm Material
5-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum		
	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
7-Aluminum,BSP	2-Cast Iron(steel hardware)		3-Viton	3-Viton
		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	A-Stainless Steel	
	B-SS(stainless hardware)	8-Hard 400 Stainless Steel	C-Hytrel	6-Composite PTFE
	C-Cast Iron(stainless hardware)	9-Hytrel	E-Santoprene	9-Hytrel
		E-Santoprene		B-Santoprene
		G-Nitrile		

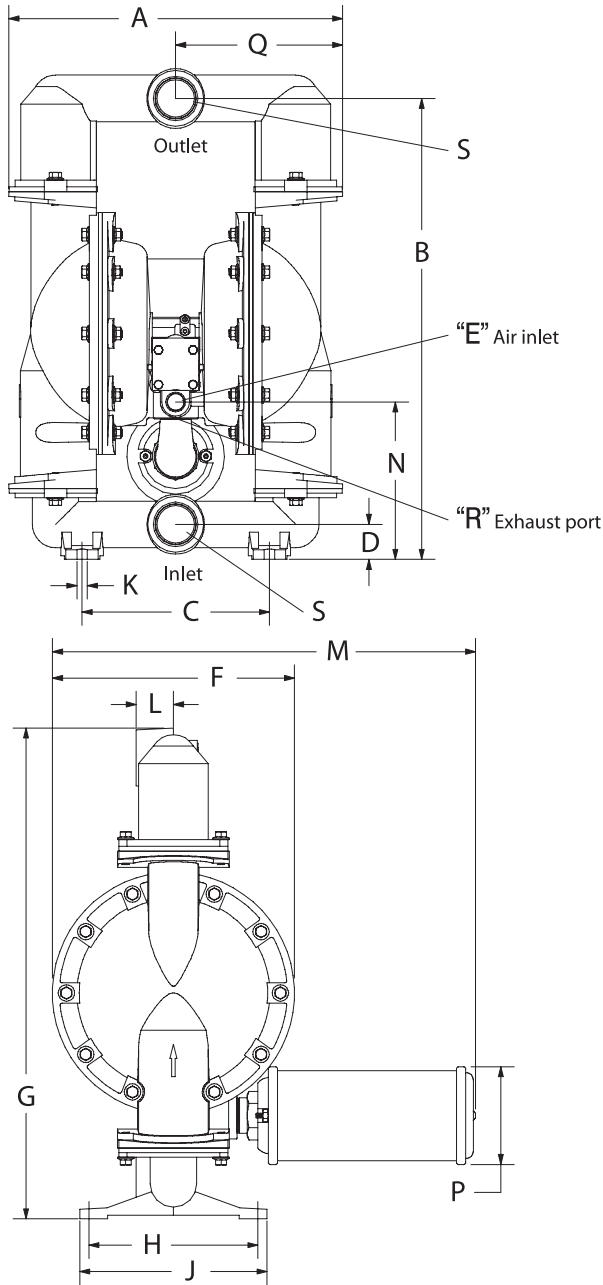
ACCESSORIES:

- Service Repair Kit | WA637434(air section)
- WA637432-XX(fluid section)

2" WA METALLIC Models

MODEL: WA25X-XXX and WA27X-XXX

DIMENSIONS:



DIMENSIONS

A 17-15/16" (455.1 mm)	G 26-3/8" (669.5 mm)	N 8-15/32" (214.6 mm)
B 24-3/4" (628.7 mm)	H 9-1/16" (230.2 mm)	P 5-1/4" (133.4 mm)
C 10-1/16" (255.6 mm)	J 10-1/16" (255.6 mm)	Q 8-13/32" (227.6 mm)
D 1-7/8" (47.6 mm)	K 9/16" (14.3 mm)	R 1-1/4 - 11-1/2N.P.T.F.-1
E 3/4 - 14 N.P.T.F. - 1	L 2" (50.8 mm)	S (see below)
F 13" (330.2 mm)	M 22-3/4" (577.3 mm)	

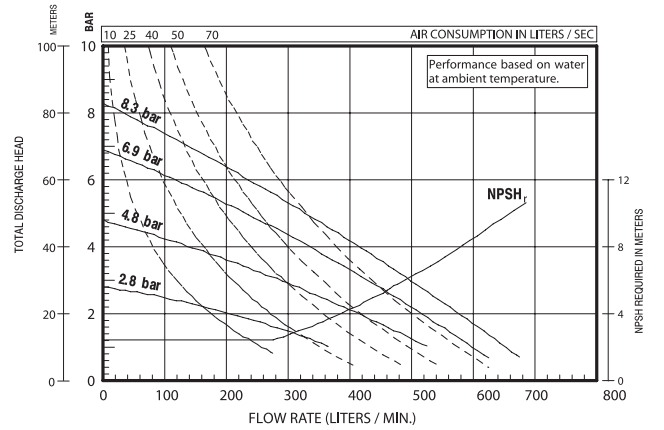
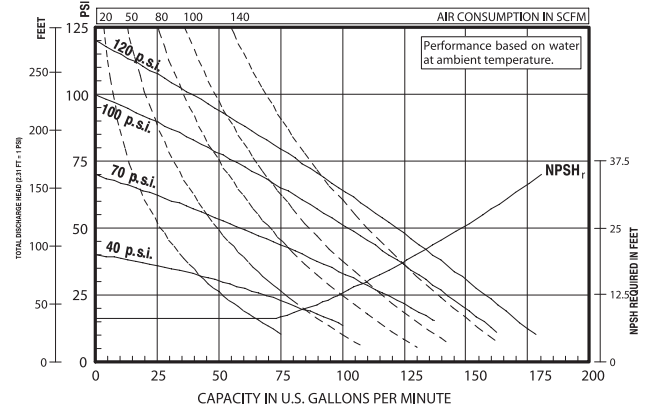
"S" Inlet / Outlet

WA25-XXX-C NPT 2"

WA27-XXX-C Rp 2 (2 - 11 BSP parallel)

NOTE: Dimensions are shown in inches and (mm), supplied for reference only and are typically rounded up to the nearest 1/16 inch.

PERFORMANCE CURVE:



2" WB METALLIC Models MODEL: WB20X-XXX-XXX



SPECIFICATIONS:

Ratio: 1:1
 Maximum GPM (LPM): 172 (651)
 Displacement per cycle: 1.4 (5.3)
 @ 100 psi Gallons (Liters)
 Air Inlet (Female): 3/4 - 14 N.P.T.F.-1
 Fluid Inlet/Outlet (Female):
 WB20X-AXX-XXX-B: 2 - 11-1/2 N.P.T.F.-1
 WB20X-BXX-XXX-B: Rp 2 (2 - 11 BSP parallel)
 WB20X-FXX-XXX-B: 2" ANSI/DIN hybrid flange
 Max. operating pressure psi (bar): 120 (8.3)
 Suspended solids max. dia. in. (mm): 1/4" (6.4)
 Maximum dry suction lift ft (m): 14 (4.2)
 Sound Level: 70 PSI 50 Cycles/Min 85.0 db(A)
 Weight lbs (kg): AL-Aluminum, CI-Cast Iron, H-Hastelloy, SS-Stainless Steel

Air Motor	Connection	Wetted	Pump Wgt	Air Motor	Connection	Wetted	Pump Wgt	Air Motor	Connection	Wetted	Pump Wgt
AL	Thread	AL	91.4 (41.5)	Poly	Thread	CI	165 (74.8)	SS	Thread	AL	120.3 (54.6)
AL	Thread	CI	147.4 (66.9)	Poly	Thread	SS	154 (69.9)	SS	Thread	CI	176.3 (80)
AL	Thread	SS	149.8 (68)	Poly	Flange	SS	146 (66.2)	SS	Thread	SS	178.7 (81.1)
AL	Flange	SS	162.2 (73.6)					SS	Flange	SS	191.1 (86.7)

WB20A

WB20R

WB20S

MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8				
Example:	WB20	X	-	X	X	X	-	X	X	X				

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB20- Standard Pump	A - Aluminum* R - Polypropylene S - Stainless Steel*	A - NPTF Thread B - BSP Thread F [†] - 2" ANSI/DIN Hybrid Center Flange † Stainless Steel Pumps Only	A - Aluminum* C - Cast Iron S - Stainless Steel*	P - Plated Steel S - SS	A - Santoprene® C - Hytrel® E - Carbon Steel F - Aluminum G - Nitrile H - 440 SS K - Kynar/PVDF L - Hastelloy-C S - 316 SS	A - Santoprene® C - Hytrel® G - Nitrile S - 316 SS T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna-N L - Long-Life PTFE T - PTFE/Santoprene® V - Viton®

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Accessories

Service Repair Kits:

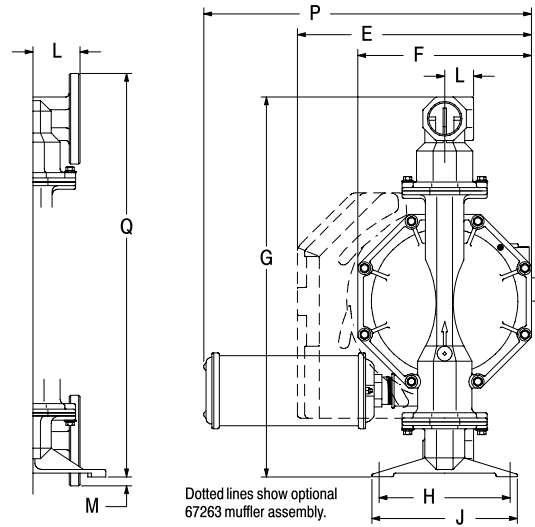
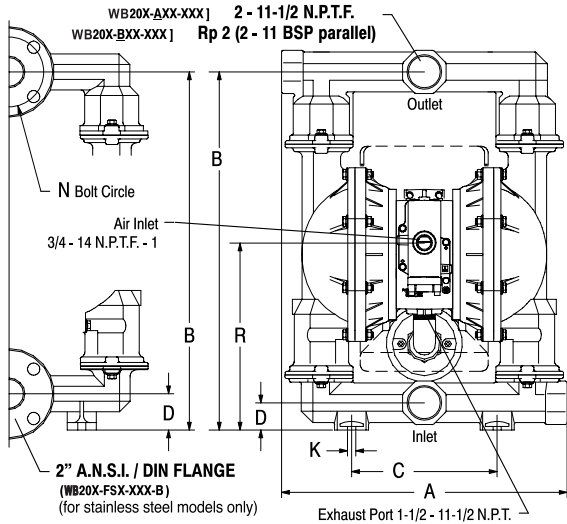
AIR SECTION: WB637369(For WB20R and WB20Y), WB637421(For WB20A and WB20S);

FLUID SECTION: WB637309-XXX(with seats);

MAJOR AIR VALVE ASSEMBLY: WB637374-X;

2" WB METALLIC Models MODEL: WB20X-XXX-XXX

DIMENSIONS:



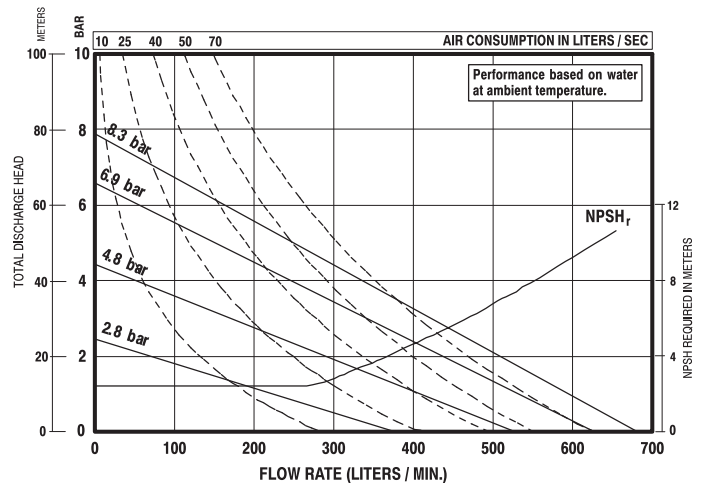
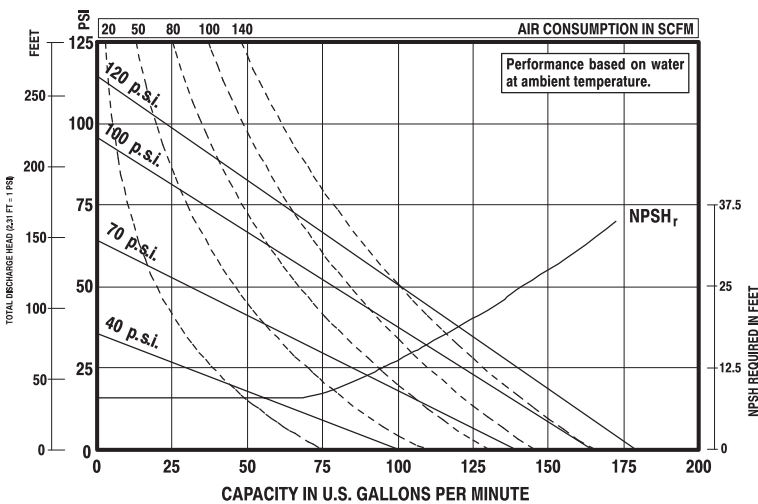
DIMENSIONS

A	see below	G	26-1/4" (666.8 mm)	M	5/8" (15.9 mm)
B	24-3/4" (628.7 mm)	H	9-1/16" (230.2 mm)	N	4.834" (122.8 mm)
C	10-1/16" (255.6 mm)	J	10-1/16" (255.6 mm)	P	21-5/8" (548 mm)
D	see below	K	9/16" (14.3 mm)	Q	27-7/8" (708.0 mm)
E	16-3/16" (411.2 mm)	L	see below	R	see below
F	12" (304.8 mm)				

WB20X-XAX-XXX-B()	"A"	19-3/4" (501.4 mm)	"D"	1-7/8" (47.6 mm)
WB20X-XCX-XXX-B()		19-3/4" (501.4 mm)		1-7/8" (47.6 mm)
WB20X-AHX-XXX-B(), -BHX		19-1/4" (488.7 mm)		2-1/2" (63.5 mm)
WB20X-ASX-XXX-B(), -BSX		19-1/4" (488.7 mm)		2-1/2" (63.5 mm)
WB20X-FHX-XXX-B(), -FSX		19-1/4" (488.7 mm)		2-1/2" (63.5 mm)

"L"	"R"
2" (50.8 mm)	12-15/16" (328.6 mm)
2" (50.8 mm)	12-15/16" (328.6 mm)
2-3/32" (53.0 mm)	13-9/16" (344.5 mm)
2-3/32" (53.0 mm)	13-9/16" (344.5 mm)
3-1/4" (82.6 mm)	13-9/16" (344.5 mm)

PERFORMANCE CURVE:



3" WA METALLIC Models

MODEL: WA30X-XXX and WA32X-XXX

SPECIFICATIONS:

Air Inlet(female): 3/4"BSPT(3/4"NPT Available On Request)

Fluid Outlet(female): 3"BSPT Or 3"NPT

Fluid Inlet(female): 3"BSPT Or 3"NPT

Maximum Flow Rate: 237GPM(897 LPM)

Max. Operating Pressure: 120psi(8.3bar)

Suspended Solids Max. Dia.: 3/8"(9.5mm)

Maximum Dry Suction Lift: 17.6feet(5.4m)

Weight:WA3X0-XXX-C 109.8 lbs(49.8kg)

WA3X1-XXX-C 222.2 lbs(100.8kg)

WA3X2-XXX-C 213.1 lbs(96.7kg)

Displacement Per Cycle: 2.65Gallons(10.03Liters)

Sound Level:70psi 60 cycles/min. 86.3db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		
Example	WA3X	X	-	X	X	X		

Position 1	Position 2	Position 3	Position 4	Position 5
Center Body	Fluid Caps Manifold Mat.	Seat Material	Ball Check Material	Diaphragm Material
0-Aluminum,NPT	0-Aluminum(steel hardware)	1-Aluminum		
	1-SS(steel hardware)	2-316 Stainless Steel	2-Nitrile	2-Nitrile
2-Aluminum,BSP	2-Cast Iron(steel hardware)			
		4-PVDF(Kynar)	4-PTFE	4-PTFE/Santoprene
	A-Aluminum,(stainless hardware)	5-Carbon Steel	A-Stainless Steel	
	B-SS(stainless hardware)	8-Hard Stainless Steel	C-Hytrel	6-Composite PTFE
	C-Cast Iron(stainless hardware)	9-Hytrel	E-Santoprene	9-Hytrel
		E-Santoprene		B-Santoprene
		G-Nitrile		G-Nitrile

ACCESSORIES:

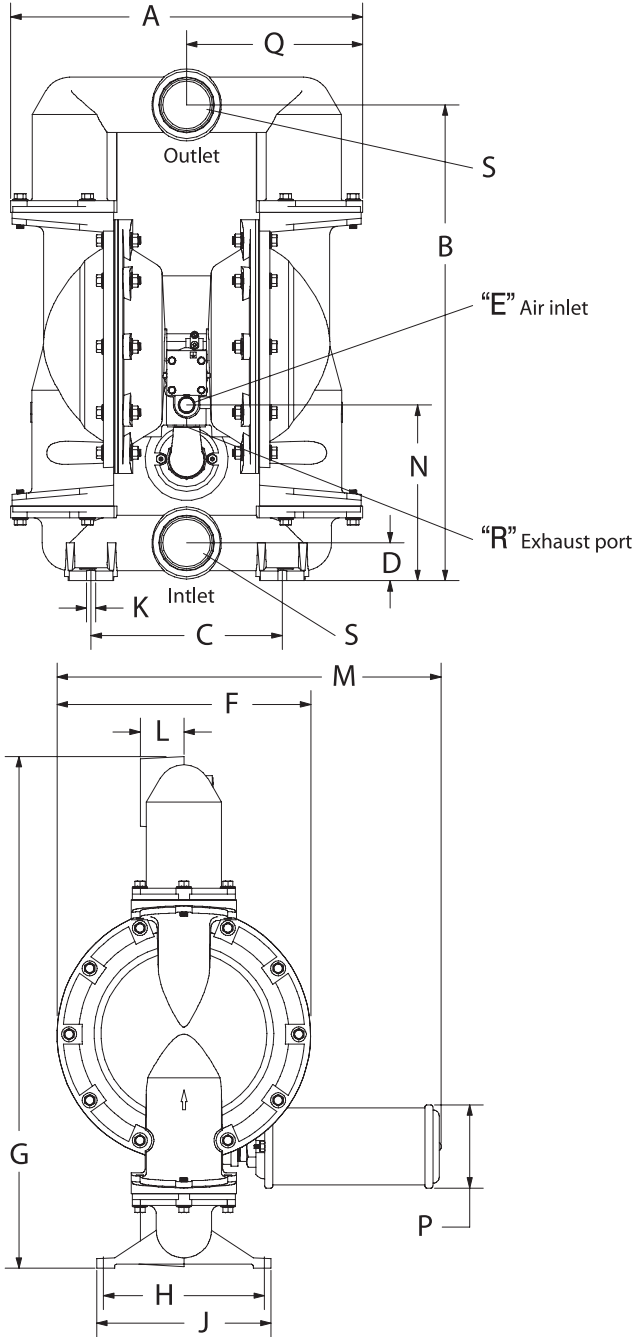
Service Repair Kit | WA637434(air section)

WA637433-XX(fluid section)

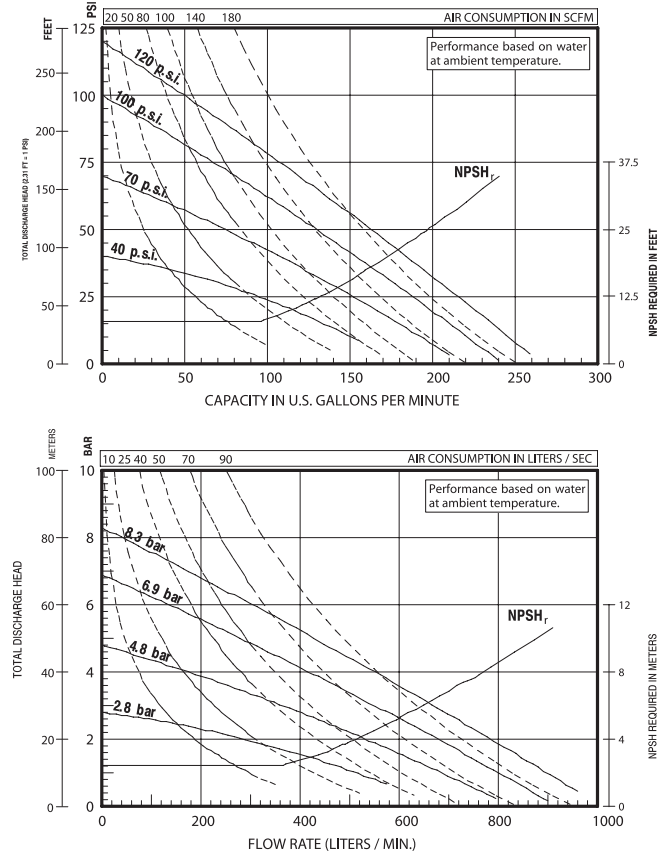
3" WA METALLIC Models

MODEL: WA30X-XXX and WA32X-XXX

DIMENSIONS:



PERFORMANCE CURVE:



DIMENSIONS

A 22-7/32" (563.9 mm)	G 32-9/32" (819.8 mm)	N 11-3/32" (281.4 mm)
B 30" (762.0 mm)	H 10-5/32" (258.0 mm)	P 5-1/4" (133.4 mm)
C 12-1/16" (306.4 mm)	J 11" (279.4 mm)	Q 11-1/8" (281.9 mm)
D 2-3/8" (60.3 mm)	K 9/16" (14.3 mm)	R 1-1/4 - 11-1/2N.P.T.F.-1
E 3/4 - 14 N.P.T.F. - 1	L 2-3/4" (69.9 mm)	S (see below)
F 16" (406.4 mm)	M 24-7/16" (620.7 mm)	

"S" Inlet / Outlet

WA30-XXX-C NPT 3"
WA32-XXX-C Rp 3 (3 - 11 BSP parallel)

3" WB METALLIC Models MODEL: WB30X-XXX-XXX

SPECIFICATIONS:

Ratio:	1:1
Maximum GPM (LPM):	275 (1041)
Displacement per cycle: @ 100 psi Gallons (Liters)	2.8 (10.6)
Air Inlet: (Female)	3/4 - 14 N.P.T.F.
Fluid Inlet / Outlet (Female):	3" - 8 N.P.T.F. Rp 3 (3 - 11 BSP ANSI or DIN Center Flange)
Max. operating pressure psi (bar):	120 (8.3)
Suspended solids max. dia. in. (mm):	3/8 (9.5)
Weight lbs (kg):	WB30A-XAX-XXX-C 129.5 (58.8) WB30A-XCX-XXX-C 221.1 (100.3) WB30A-AHX-XXX-C 249.4 (113.3) WB30A-ASX-XXX-C 228.3 (103.8) WB30A-FHX-XXX-C 269.4 (122.3) WB30A-FSX-XXX-C 245.2 (114.4)
	Note: Add 40 lbs (18.2 kg) for stainless steel air motor section
Maximum dry suction lift ft (m):	14 (4.2)
Sound Level:	70 PSI 50 Cycles / Min 83.0db(A)



MODEL DESCRIPTION & ORDERING:

Position	1	2		3	4	5		6	7	8			
Example:	WB30	X	-	X	X	X	-	X	X	X			

Position 1 Model Series	Position 2 Center Section	Position 3 Connections	Position 4 Wetted Parts	Position 5 Hardware	Position 6 Seat Material	Position 7 Ball Material	Position 8 Diaphragm Material
WB30 - Standard Pump	A - Aluminum* R - Polypropylene w/SS Air Caps S - Stainless Steel*	A - NPTF Thread B - BSP Thread D [†] - ANSI 4-hole center flange F [†] - DIN 4-hole center flange † Stainless Steel Pumps Only	A - Aluminum* C - Cast Iron S - Stainless Steel*	P - Plated Steel S - Stainless Steel	A - Santoprene® C - Hytrel® E - Carbon Steel F - Aluminum G - Nitrile H - 440 SS K - PVDF L - Hastelloy S - 316 SS	A - Santoprene® C - Hytrel® G - Nitrile T - PTFE V - Viton®	A - Santoprene® C - Hytrel® G - Buna- N L - Long-Life PTFE T - PTFE/ Santoprene® V - Viton®

Hytrel® is a registered trademark of DuPont company, Santoprene® is registered trademark of Monsanto and Viton® is a registered trademark of ExxonMobil

▀ Accessories

Service Repair Kits:

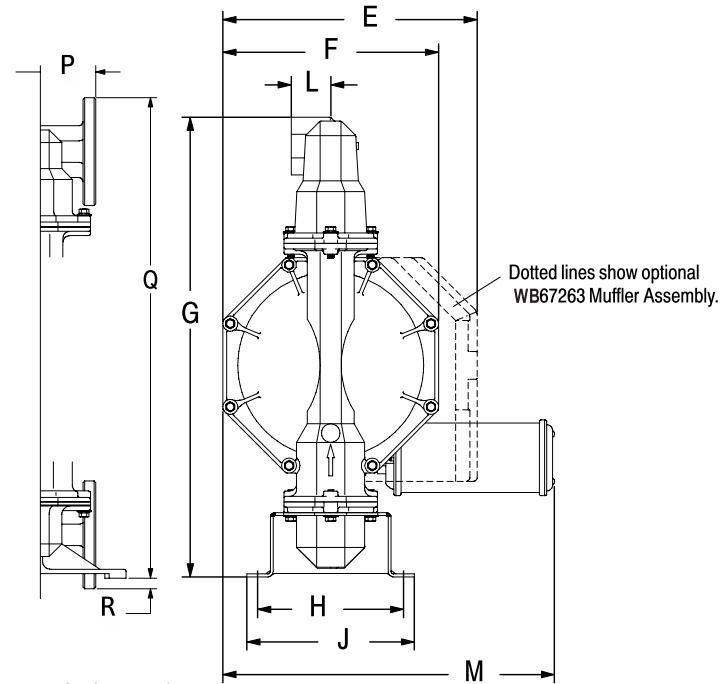
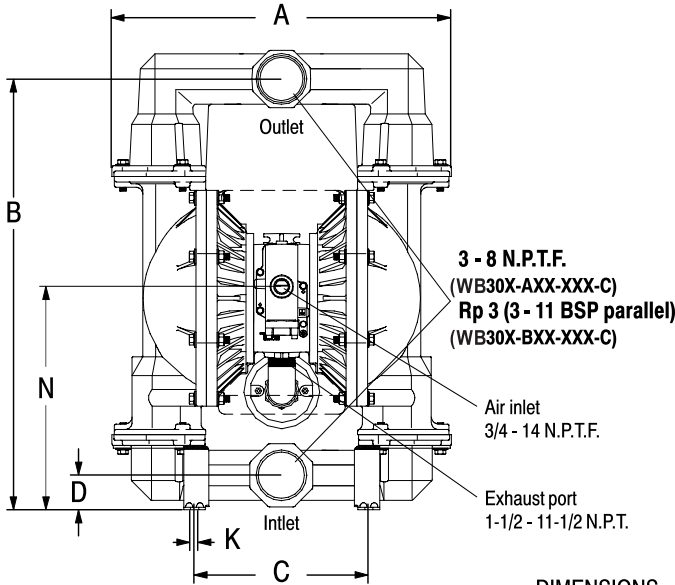
AIR SECTION: WB637369(For WB30R), WB637421(For WB30A and WB30S);

FLUID SECTION: WB637303-XXX(with seats);

MAJOR AIR VALVE ASSEMBLY: WB637374-X;

3" WB METALLIC Models MODEL: WB30X-XXX-XXX

DIMENSIONS:



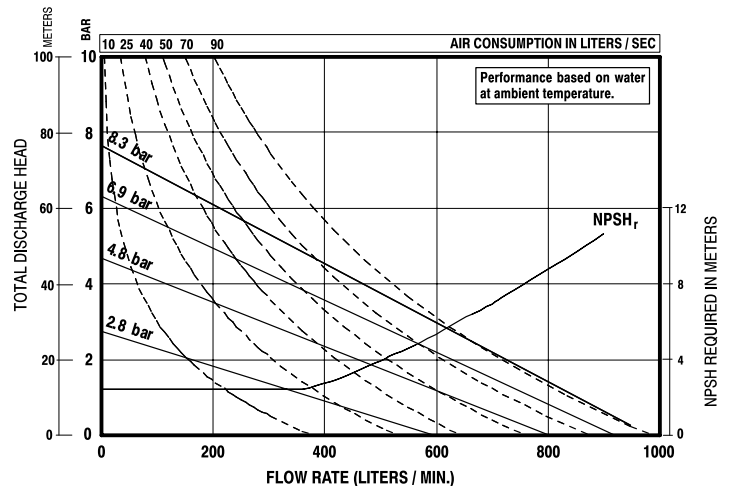
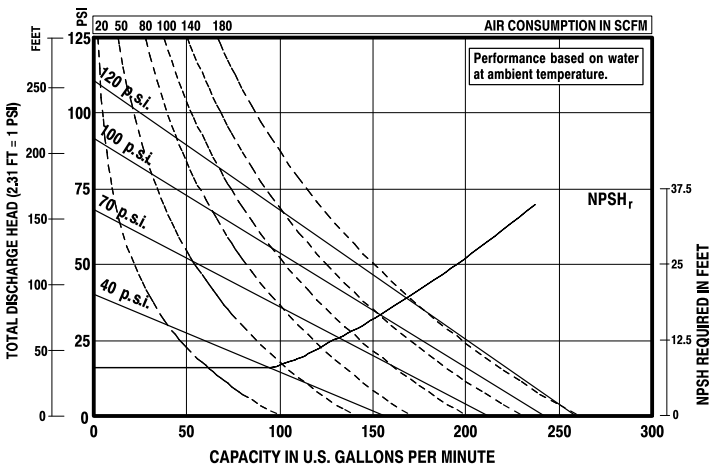
DIMENSIONS

A	see below	F	15" (381 mm)	L	2-3/4" (69.9 mm)
B	30" (761.7 mm)	G	32" (812.5 mm)	M	23-3/32" (586.3 mm)
C	12-1/16" (306.5 mm)	H	10-5/32" (258 mm)	N	See Below
D	see below	J	see below	P	See Below
E	17-11/16" (449.2 mm)	K	9/16" (4.3 mm)	Q	27-7/8" (708.0 mm)
				R	5/8" (5.9 mm)

"A"	WB30X-XAX-XXX-C	23-5/8" (598.7 mm)	"D"	WB30X-XCX-XXX-C	23-5/8" (598.7 mm)
	WB30X-XCX-XXX-C	23-5/8" (598.7 mm)		WB30X-XHX-XXX-C	23-1/8" (587.3 mm)
	WB30X-XHX-XXX-C	23-1/8" (587.3 mm)		WB30X-XSX-XXX-C	23-1/8" (587.3 mm)
	WB30X-XSX-XXX-C	23-1/8" (587.3 mm)			

"J"	11" (279.4 mm)	"N"	15-1/2" (393.7 mm)	"P"	2" (50.8 mm)
	11-11/16" (296.1 mm)		15-1/2" (393.7 mm)		2" (50.8 mm)
	11-11/16" (296.1 mm)		16" (406.4 mm)		2-3/32" (53.0 mm)
	11-11/16" (296.1 mm)		16" (406.4 mm)		2-3/32" (53.0 mm)
					3-1/4" (82.6 mm)

PERFORMANCE CURVE:





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