

1-1/2" Metallic Models

EXP SERIES PUMPS

ARO® 1-1/2" metallic diaphragm pumps achieve flow rates of up to 123.1 GPM (465.9 LPM) and offer a wide array of material and porting configurations. These pumps are often used for transfer, filling, recirculation and batching in paint, oil and gas, chemical and petrochemical markets.

UPGRADE
PUMP FOR REMOTE
ACTUATION CAPABILITY

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):	PX15R-XAX-XXX 37.7 (17.1) PX15R-XCX-XXX 73.2 (33.2) PX15R-XSX-XXX 61.2 (27.8) PX15R-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



Ordering

Position	1	2	3	4	5	6	7	8	9	10	11			
Example:	PX15	X	-	X	X	X	-	X	X	X	-	A	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	Position 9
PD15 - Standard Pump PE15 - Electronic Interface Accessible Pump	A - Aluminum* R - Polypropylene S - Stainless Steel*	A - NPTF Thread B - BSP Thread Y† - 1-1/2" ANSI/DIN Hybrid Center Flange † Stainless Steel Only	A - Aluminum* C - Cast Iron H - Hastelloy-C* 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®	Revision Level Position 10 & 11 Specialty Code Fluid control options for pump with electronic interface (PE15 model). See complete description on page 37

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2, Group A-D
- ATEX: Zone 1&2, 21&22

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

Accessories

Air Line Connection Kit | 66084-1

(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Diaphragm Failure Detection | 67237

Service Repair Kits | 637389 (air motor for PX15X), 637375-XXX (fluid section with seats), 637390-X (major air valve assembly)

1-1/2" Metallic Dimensions and Flow Charts

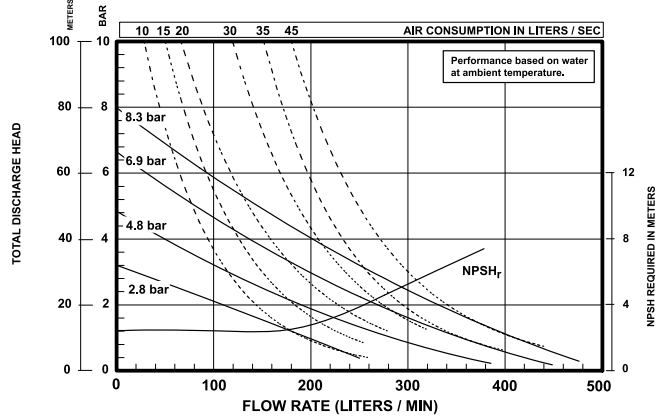
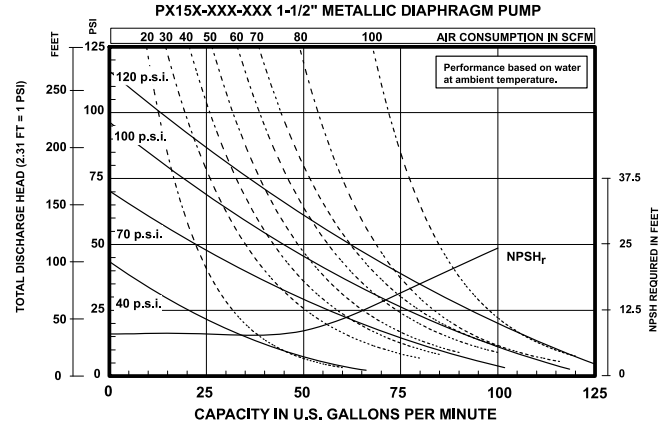
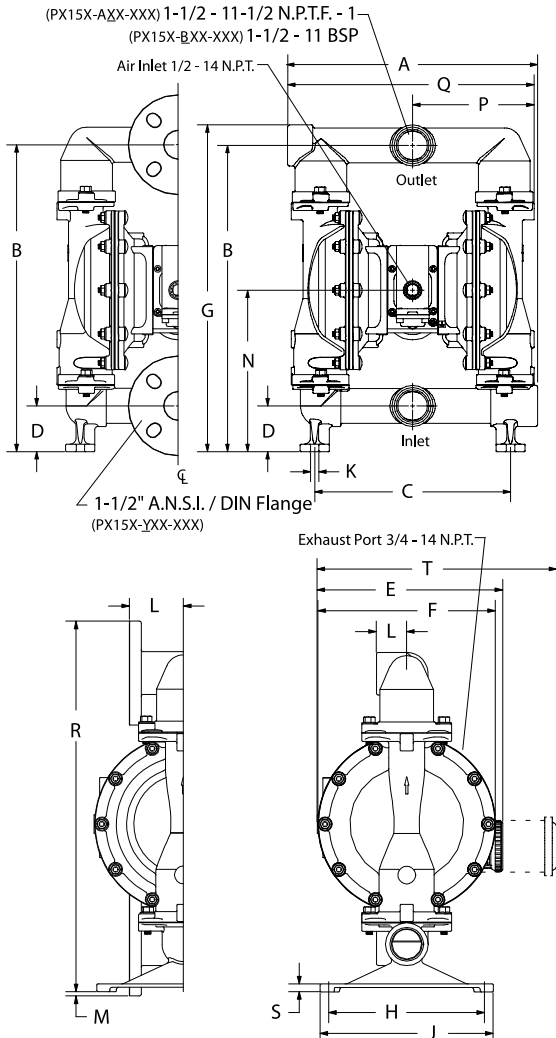
A - see below	G - 19-5/8" (498.1 mm)	N - 9-11/16" (246.0 mm)
B - 18-3/8" (466.7 mm)	H - 9" (228.6 mm)	P - see below
C - 11-3/4" (298.5 mm)	J - 10" (254.0 mm)	Q - see below
D - 2-3/4" (69.9 mm)	K - 1-1/2" (12.7 mm)	R - 21-7/16" (543.9 mm)
E - see below	L - see below	S - see below
F - 10-1/4" (260.4 mm)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

	"A"	"L"
PX15X- <u>X</u> AX-XXX	14-7/8" (377.8 mm)	1-3/4" (44.5 mm)
PX15X- <u>X</u> CX-XXX	14-5/8" (371.5 mm)	1-3/4" (44.5 mm)
PX15X- <u>X</u> HX-XXX	14-9/16" (370.0 mm)	3-1/8" (79.4 mm)
PX15X- <u>A</u> SX-XXX, <u>BS</u> X	14-25/32" (375.5 mm)	1-3/4" (44.5 mm)
PX15X- <u>Y</u> SX-XXX	14-9/16" (370.0 mm)	3-1/8" (79.4 mm)

	"E"	"T"
PX15A-XXX-XXX	-----	14-1/32" (356.2 mm)
PX15R-XXX-XXX	11-3/32" (281.3 mm)	-----
PX15S-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"
PX15A-XXX-XXX	-----	14-1/32" (356.2 mm)
PX15R-XXX-XXX	11-3/32" (281.3 mm)	-----
PX15S-XXX-XXX	-----	13-27/32" (351.4 mm)



Performance based on an elastomeric fitted pump, flooded suction with water at ambient conditions. Due to varying materials of construction, assembly configurations and operating conditions, published data is for reference only

Ordering Position 10

Specialty Code 1 (Blank if no Specialty Code)

A - Solenoid 120VAC	G - Solenoid 12VDC ATEX/IECex*
B - Solenoid 12VDC	H - Solenoid 24VDC ATEX/IECex*
C - Solenoid 240VAC	J - 120VAC NEC/CEC*
D - Solenoid 24VDC	K - Solenoid 220VAC ATEX/IECex*
E - 12vDC NEC/CEC*	N - Solenoid with no coil
F - 24vDC NEC/CEC*	O - Standard Valve Block (No Solenoid)
	P - Ported Motor (No major valve provided)

Ordering Position 11

Specialty Code 2 (Blank if no Specialty Code)

E - End of stroke feedback + Leak Detection	L - Leak Detection
F - End of stroke feedback	M - Leak Detection ATEX/IECex/NEC/CEC*
G - End of Stroke ATEX/IECex*	O - No Option
H - End of Stroke/Leak Detection ATEX/IECex*	R - End of Stroke Feedback NEC / CEC*
	T - End of Stroke Feedback + Leak Detection NEC / CEC*

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2, Group A-D
- ATEX: Zone 1&2, 21&22

2" Metallic Models

EXP SERIES PUMPS

ARO® EXP 2" metallic pumps achieve flow rates of up to 172 GPM (651 LPM) and offer a wide array of material and porting configurations. These pumps are often used for transfer, filling, recirculation and batching in ceramic, paint, oil and gas, chemical and petrochemical markets.

UPGRADE
PUMP FOR REMOTE
ACTUATION CAPABILITY

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): PX20X-AXX-XXX-B() 2 - 11-1/2 N.P.T.F.-1
 PX20X-BXX-XXX-B() Rp 2 (2 - 11 BSP parallel)
 PX20X-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)
 Muffler Included: 67389
 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
PD20A	AL	Thread	AL	91.4 (41.5)	PD20R	Poly	Thread	CI	165 (74.8)	PD20S	SS	Thread	AL	120.3 (54.6)
	AL	Thread	CI	147.4 (66.9)		Poly	Thread	H	154 (69.9)		SS	Thread	CI	176.3 (80)
	AL	Thread	H	155 (70.3)		Poly	Thread	SS	154 (69.9)		SS	Thread	H	183.9 (83.4)
	AL	Thread	SS	149.8 (68)		Poly	Flange	H	153.2 (69.5)		SS	Thread	SS	178.7 (81.1)
	AL	Flange	H	169.4 (76.8)		Poly	Flange	SS	146 (66.2)		SS	Flange	H	198.3 (89.9)
	AL	Flange	SS	162.2 (73.6)							SS	Flange	SS	191.1 (86.7)

Ordering

Position	1	2		3	4	5		6	7	8		9	10	11
Example:	PX20	X	-	X	X	X	-	X	X	X	-	B	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	Position 9
PD20 - Standard Pump PE20 - Electronic Interface Accessible Pump	A - Aluminum* R - Poly-propylene 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 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 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®	Revision Level Position 10 & 11 Specialty Code Fluid control options for pump with electronic interface (PE20 model). See complete description on page 39

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2 , Group A-D
- ATEX: Zone 1&2, 21&22

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

Accessories

Air Line Connection Kit | 66109

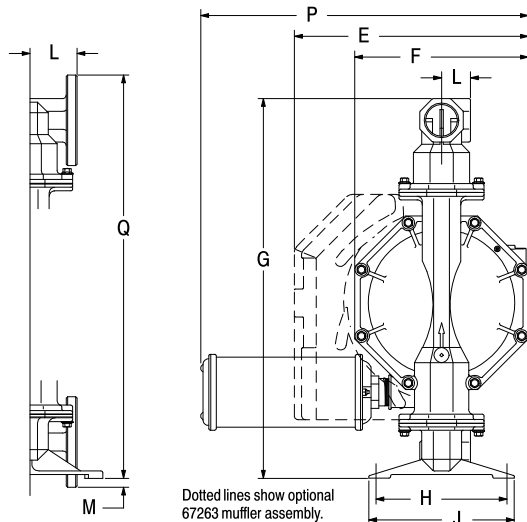
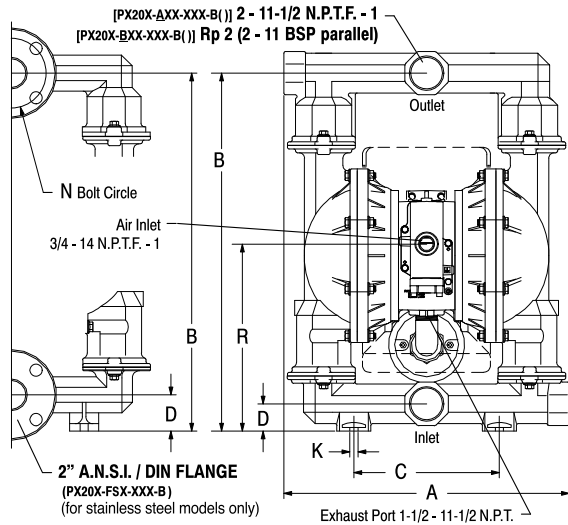
(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Diaphragm Failure Detection | 67237 (PE20X pump model is required)

Muffler features large expansion chamber, permitting cold exhaust air to exit pump

Service Repair Kits | 637369 (air motor for PX20R and PX20Y), 637421 (air motor for PX20A and PX20S), 637309-XXX (fluid section with seats), 637374-X (major air valve assembly)

2" Metallic Dimensions and Flow Charts



Dotted lines show optional 67263 muffler assembly.

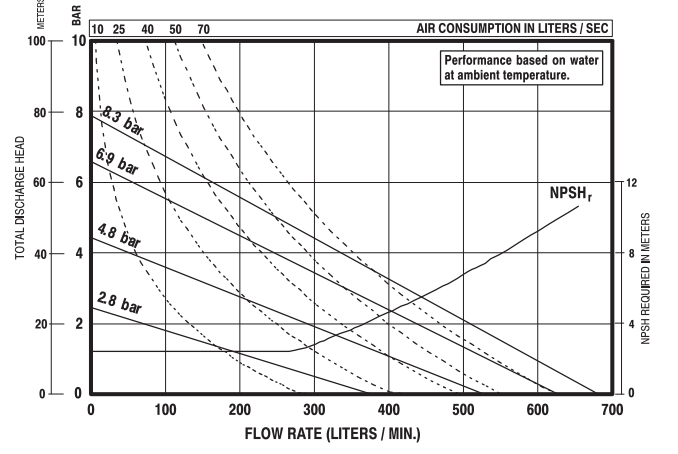
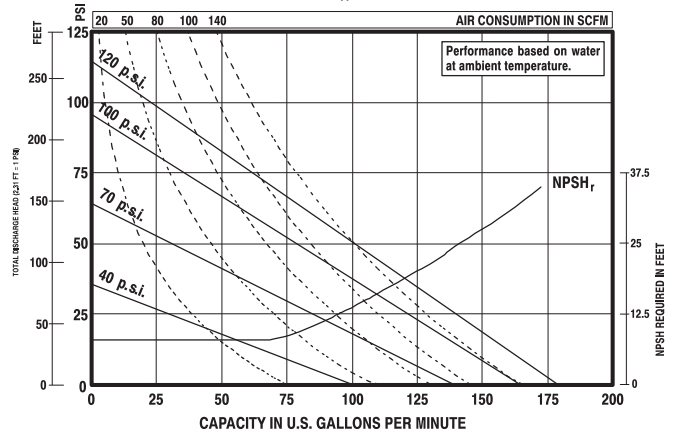
DIMENSIONS

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)		

PX20X-XAX-XXX-B()	19-3/4" (501.4 mm)	1-7/8" (47.6 mm)
PX20X-XCX-XXX-B()	19-3/4" (501.4 mm)	1-7/8" (47.6 mm)
PX20X-AHX-XXX-B(), -BHX	19-1/4" (488.7 mm)	2-1/2" (63.5 mm)
PX20X-ASX-XXX-B(), -BSX	19-1/4" (488.7 mm)	2-1/2" (63.5 mm)
PX20X-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)

PD20X-XXX-XXX-B / PE20X-XXX-XXX-B() 2" METALLIC DIAPHRAGM PUMP



Performance based on an elastomeric fitted pump, flooded suction with water at ambient conditions. Due to varying materials of construction, assembly configurations and operating conditions, published data is for reference only

Ordering Position 10 Specialty Code 1 (Blank if no Specialty Code)

A - Solenoid 120VAC	G - Solenoid 12VDC ATEX/IECex*
B - Solenoid 12VDC	H - Solenoid 24VDC ATEX/IECex*
C - Solenoid 240VAC	J - 120VAC NEC/CEC*
D - Solenoid 24VDC	K - Solenoid 220VAC ATEX/IECex*
E - 12vDC NEC/CEC*	N - Solenoid with no coil
F - 24vDC NEC/CEC*	O - Standard Valve Block (No Solenoid)
	P - Ported Motor (No major valve provided)

Ordering Position 11 Specialty Code 2 (Blank if no Specialty Code)

E - End of stroke feedback + Leak Detection	L - Leak Detection
F - End of stroke feedback	M - Leak Detection ATEX/IECex/NEC/CEC*
G - End of Stroke ATEX/IECex*	O - No Option
H - End of Stroke/Leak Detection ATEX/IECex*	R - End of Stroke Feedback NEC / CEC*
	T - End of Stroke Feedback + Leak Detection NEC / CEC*

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2, Group A-D
- ATEX: Zone 1&2, 21&22

3" Metallic Models

EXP SERIES PUMPS

ARO® EXP 3" metallic diaphragm pumps achieve flow rates of up to 275 GPM (1040.9 LPM) and offer a wide array of material and porting configurations. These pumps are often used for transfer, filling, recirculation and batching in ceramic, paint, oil and gas, chemical and petrochemical markets.

UPGRADE
PUMP FOR REMOTE
ACTUATION CAPABILITY

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. - 1
Fluid Inlet / Outlet (Female):	3" - 8 N.P.T.F. - 1 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):	PX30A-XAX-XXX-C 129.5 (58.8) PX30A-XCX-XXX-C 221.1 (100.3) PX30A-AHX-XXX-C 249.4 (113.3) PX30A-ASX-XXX-C 228.3 (103.8) PX30A-FHX-XXX-C 269.4 (122.3) PX30A-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)
Muffler Included:	67389



Ordering

Position	1	2		3	4	5		6	7	8		9	10	11
Example:	PX30	X	-	X	X	X	-	X	X	X	-	C	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	Position 9
PD30 - Standard Pump PE30 - Electronic Interface Accessible 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 H ^{††} - Hastelloy-C* S - Stainless Steel* †† Not available on PD30R-X models	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®	Revision Level Position 10 & 11 Specialty Code Fluid control options for pump with electronic interface (PE30 model). See complete description on page 41

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2, Group A-D
- ATEX: Zone 1&2, 21&22

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

Accessories

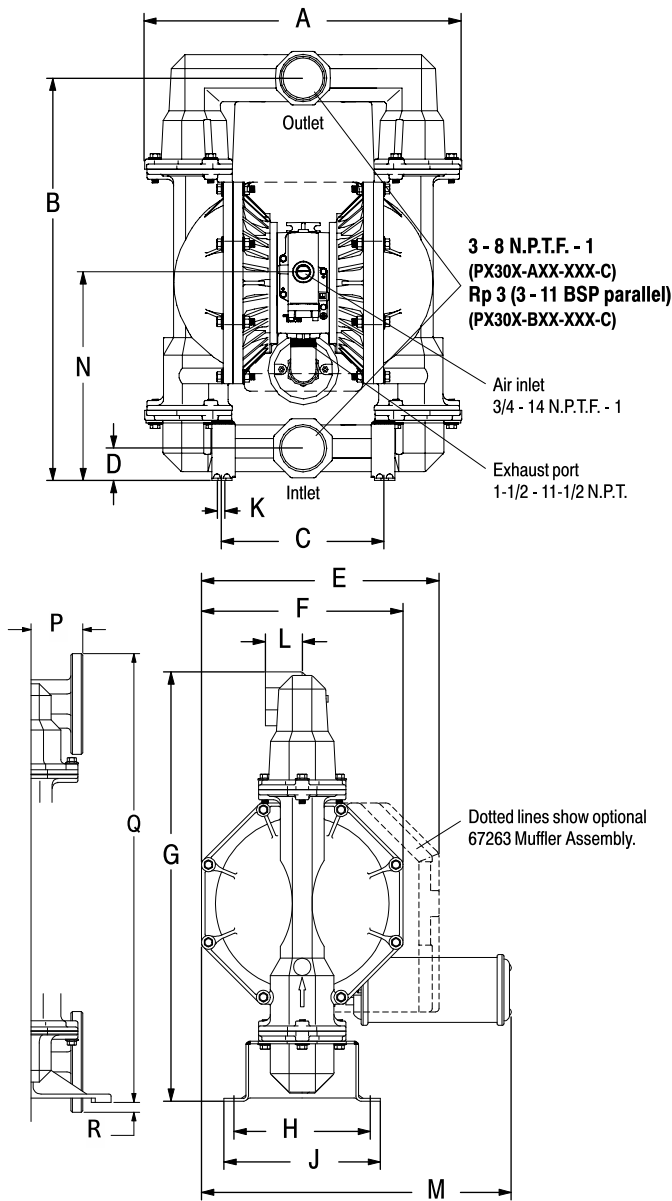
Air Line Connection Kit | 66109

(Piggyback Filter/Regulator with gauge, pipe nipple and 5-foot air hose)

Diaphragm Failure Detection | 67237

Service Repair Kits | 637369 (air motor for PX30R), 637421 (air motor for PX30A and PX30S), 637374-X (major air valve assembly), 637303-XXX (fluid section with seats)

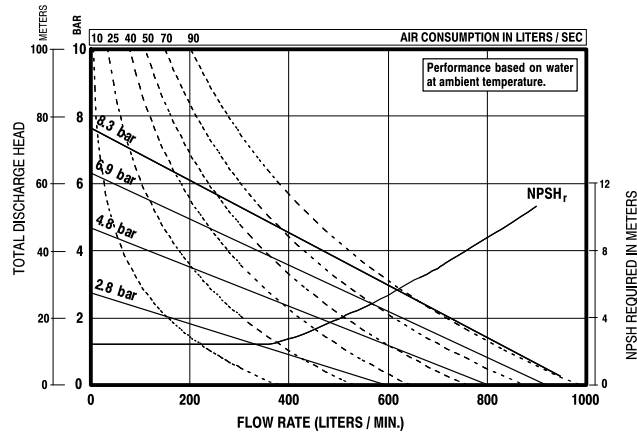
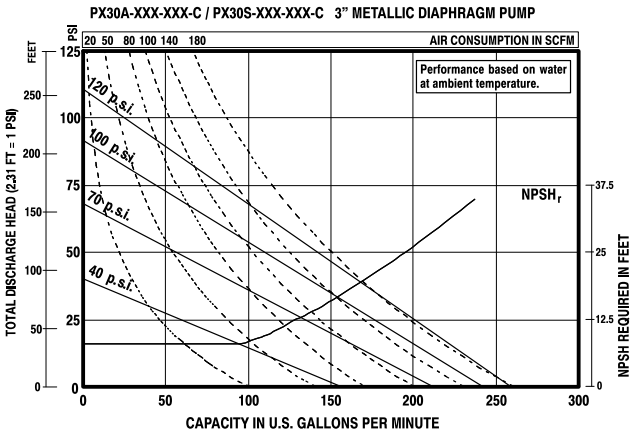
3" Metallic Dimensions and Flow Charts



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"	"D"
PX30X-XAX-XXX-C	23-5/8" (598.7 mm)	2-3/8" (60.3 mm)
PX30X-XCX-XXX-C	23-5/8" (598.7 mm)	2-7/16" (61.1 mm)
PX30X-XHX-XXX-C	23-1/8" (587.3 mm)	2-3/4" (69.9 mm)
PX30X-XSX-XXX-C	23-1/8" (587.3 mm)	2-3/4" (69.9 mm)
	"J"	"p"
	11" (279.4 mm)	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)	15-1/2" (393.7 mm)	2-3/32" (53.0 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)	3-1/4" (82.6 mm)



Performance based on an elastomeric fitted pump, flooded suction with water at ambient conditions. Due to varying materials of construction, assembly configurations and operating conditions, published data is for reference only

Ordering Position 10

Specialty Code 1 (Blank if no Specialty Code)

A - Solenoid 120VAC	G - Solenoid 12VDC ATEX/IECex*
B - Solenoid 12VDC	H - Solenoid 24VDC ATEX/IECex*
C - Solenoid 240VAC	J - 120VAC NEC/CEC*
D - Solenoid 24VDC	K - Solenoid 220VAC ATEX/IECex*
E - 12vDC NEC/CEC*	N - Solenoid with no coil
F - 24vDC NEC/CEC*	O - Standard Valve Block (No Solenoid)
	P - Ported Motor (No major valve provided)

Ordering Position 11

Specialty Code 2 (Blank if no Specialty Code)

E - End of stroke feedback + Leak Detection	L - Leak Detection
F - End of stroke feedback	M - Leak Detection ATEX/IECex/NEC/CEC*
G - End of Stroke ATEX/IECex*	O - No Option
H - End of Stroke/Leak Detection ATEX/IECex*	R - End of Stroke Feedback NEC / CEC*
	T - End of Stroke Feedback + Leak Detection NEC / CEC*

* Acceptable for use in hazardous locations. - NEC / CEC: Class I&II, Div 1&2, Group A-D
- ATEX: Zone 1&2, 21&22