



Catalog : [Advanced™ Metal Pumps](#) : PX1500 - 76 mm (3") Metal Pump : Specifications

[Pump User's Guide](#)

Wilden PX1500 - 76 mm (3") Metal Pump

FLOW RATE TO 1021 LPM (270 GPM)
MAX PRESSURE = 8.6 BAR (125 PSI)

WETTED HOUSINGS (Water Chambers and Manifolds)

Material

Aluminum
 Aluminum Drop-In
 316L S.S.
 Alloy C

Ship Wt

83 kg (182 lbs)
 70 kg (152 lbs)
 125 kg (275 lbs)
 130 kg (287 lbs)

NON-WETTED HOUSINGS

Description

Center Section
 Air Valve

Material

Aluminum
 Aluminum

MAXIMUM SUCTION LIFT CAPABILITY

8.8 m (28.9') Wet

MAXIMUM DIAMETER SOLIDS

12.7 mm (1/2")

ELASTOMER OPTIONS

Material

Buna-N®
 Neoprene
 Nordel®
 Polyurethane
 Saniflex™
 Tetra-Flex™
 Teflon® PTFE
 Viton®
 Wil-Flex™

Temperature Limits

-12.2 (+10) to +65.6 (+150) °C (F°)
 -17.8 (+0) to +93.3 (+200) °C (F°)
 -51.1 (-60) to +137.8 (+280) °C (F°)
 -12.2 (+10) to +65.6 (+150) °C (F°)
 -28.9 (+20) to +104.4 (+220) °C (F°)
 +4.4 (+40) to +104.4 (+220) °C (F°)
 +4.4 (+40) to +104.4 (+220) °C (F°)
 -40 (-40) to +176.7 (+350) °C (F°)
 -40 (-40) to +107.2 (+225) °C (F°)

DXF DRAWINGS (CAD REQUIRED)



[PX1500-ADV-MTL-SS](#)

1037 k



[PX1500-ADV-Metal Drop-In](#)

2759 k



[PX1500-ADV-Metal](#)

1844 k

ENGINEERING OPERATION & MAINTENANCE MANUAL



[PX1500 METAL PERF.pdf](#)

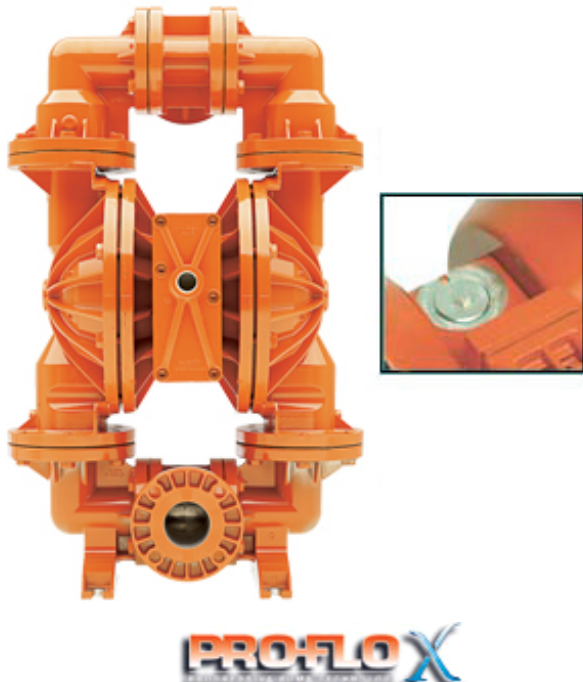
5636 k



[PX1500 ADV MTL.pdf](#)

7696 k

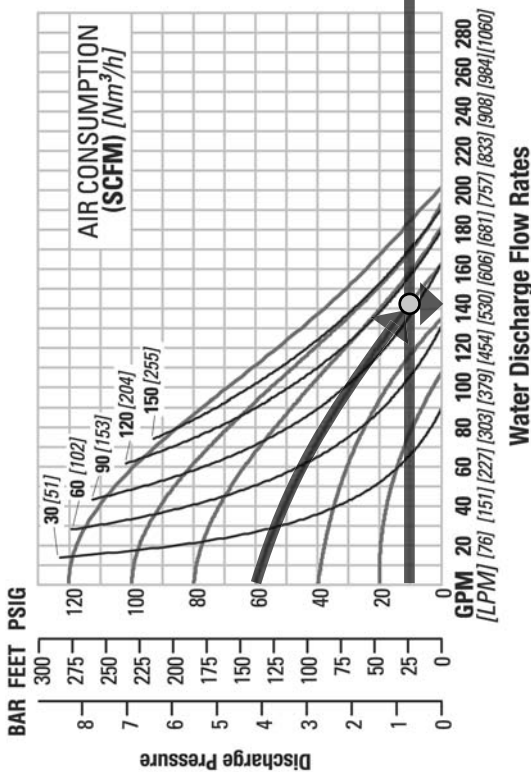
PUMP USER'S GUIDE



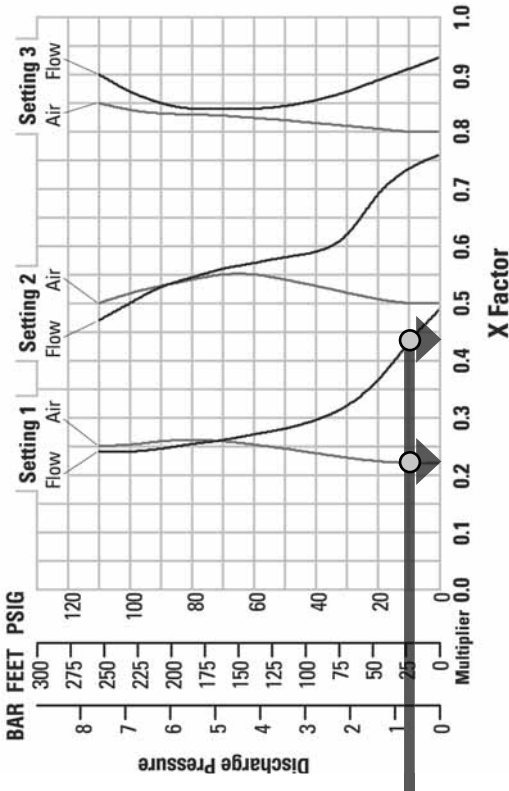
PROFLOX

PX1500 ALUMINUM PTFE-FITTED

SETTING 4 PERFORMANCE CURVE



EMS CURVE



TECHNICAL DATA

Height	1031 mm (40.6")
Width	615 mm (24.2")
Depth	422 mm (16.6")
Ship Weight	Aluminum 83 kg (182 lbs.) Aluminum Drop-In 70 kg (152 lbs.)
Air Inlet	19 mm (3/4")
Inlet	76 mm (3")
Outlet	76 mm (3")
Suction Lift	4.4 m Dry (14.5') 7.8 m Wet (25.5')
Disp. Per Stroke	3.48 (0.92 gal.)
Max. Flow Rate	765 lpm (202 gpm)
Max. Size Solids	12.7 mm (1/2")

*Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

The Efficiency Management System (EMS) can be used to optimize the performance of your Wilden pump for specific applications. The pump is delivered with the EMS adjusted to setting 4, which allows maximum flow.

The EMS curve allows the pump user to determine flow and air consumption at each EMS setting. For any EMS setting and discharge pressure, the "X factor" is used as a multiplier with the original values from the setting 4 performance curve to calculate the actual flow and air consumption values for that specific EMS setting. Note: you can interpolate between the setting curves for operation at intermediate EMS settings

The Efficiency Management System (EMS) can be used to optimize the performance of your Wilden pump for specific applications. The pump is delivered with the EMS adjusted to setting 4, which allows maximum flow.

EXAMPLE

A PX1500 aluminum, PTFE-fitted pump operating at EMS setting 4, achieved a flow rate of 538 lpm (142 gpm) using 160 Nm³/h (94 scfm) of air when run at 4.1 bar (60 psig) air inlet pressure and 0.7 bar (10 psig) discharge pressure (See dot on performance curve).

The end user did not require that much flow and wanted to reduce air consumption at his facility. He determined that EMS setting 1 would meet his needs. At 0.7 bar (10 psig) discharge pressure and EMS setting 1, the flow "X factor" is 0.43 and the air "X factor" is 0.22 (see dots on EMS curve).

Multiplying the original setting 4 values by the "X factors" provides the setting 1 flow rate of 231 lpm (61 gpm) and an air consumption of 35 Nm³/h (21 scfm). The flow rate was reduced by 57% while the air consumption was reduced by 78%, thus providing increased efficiency.

For a detailed example for how to set your EMS, see beginning of performance curve section.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.

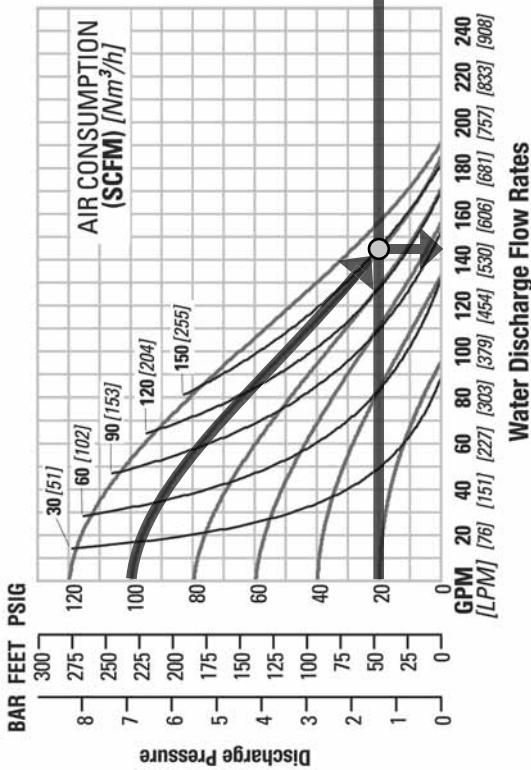
PX1500 STAINLESS STEEL PTFE-FITTED



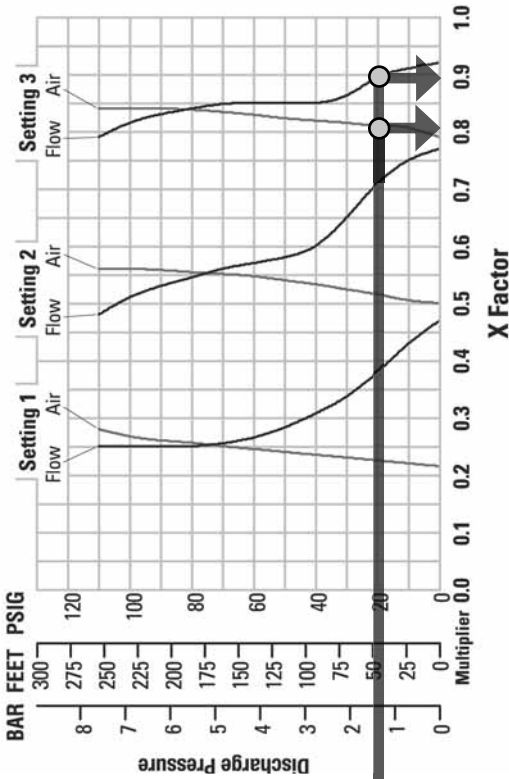
PERFORMANCE



SETTING 4 PERFORMANCE CURVE



EMS CURVE



TECHNICAL DATA

Height	.....894 mm (35.2")
Width	.....541 mm (21.3")
Depth	.....419 mm (16.5")
Ship Weight	.....316 Stainless Steel 125 kg (275 lbs)
	.....Alloy C 130 kg (287 lbs)
Air Inlet	.....19 mm (3/4")
Inlet	.....76 mm (3")
Outlet	.....76 mm (3")
Suction Lift	.....4.8 m Dry (15.9')
	.....9.5 m Wet (31.2')
Disp. Per Stroke	.....3.14 l (0.83 gal.)
Max. Flow Rate	.....727 lpm (192 gpm)
Max. Size Solids	.....9.5 mm (3/8")

*Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

The Efficiency Management System (EMS) can be used to optimize the performance of your Wilden pump for specific applications. The pump is delivered with the EMS adjusted to setting 4, which allows maximum flow.

The EMS curve allows the pump user to determine flow and air consumption at each EMS setting. For any EMS setting and discharge pressure, the "X factor" is used as a multiplier with the original values from the setting 4 performance curve to calculate the actual flow and air consumption values for that specific EMS setting. Note: you can interpolate between the setting curves for operation at intermediate EMS settings

EXAMPLE

A PX1500 stainless steel, PTFE-fitted pump operating at EMS setting 4, achieved a flow rate of 545 lpm (144 gpm) using 253 Nm³/h (149 scfm) of air when run at 6.9 bar (100 psig) air inlet pressure and 1.4 bar (20 psig) discharge pressure (See dot on performance curve).

The end user did not require that much flow and wanted to reduce air consumption at his facility. He determined that EMS setting 3 would meet his needs. At 1.4 bar (20 psig) discharge pressure and EMS setting 3, the flow "X factor" is 0.89 and the air "X factor" is 0.81 (see dots on EMS curve).

Multiplying the original setting 4 values by the "X factors" provides the setting 3 flow rate of 485 lpm (128 gpm) and an air consumption of 205 Nm³/h (121 scfm). The flow rate was reduced by 11% while the air consumption was reduced by 19%, thus providing increased efficiency.

For a detailed example for how to set your EMS, see beginning of performance curve section.

Caution: Do not exceed 8.6 bar (125 psig) air supply pressure.

The Efficiency Management System (EMS) can be used to optimize the performance of your Wilden pump for specific applications. The pump is delivered with the EMS adjusted to setting 4, which allows maximum flow.