Pump User's Guide

Wilden PX800 - 51 mm (2") Advanced Metal Pump

FLOW RATE TO 712 LPM (188 GPM)
MAX PRESSURE = 8.6 BAR (125 PSIG)

WETTED HOUSINGS
(Liquid Chambers and Manifolds)

Material	Ship Wt
Aluminum	35 kg (78 lbs)
Alloy C	54 kg (119 lbs)
Stainless Steel	53 kg (117 lbs)

NON-WETTED HOUSINGS

Description	Material
Center Section	Aluminum
Air Valve	Aluminum

MAXIMUM SUCTION LIFT CAPABILITY
7.4 m (24.4') Dry

MAXIMUM DIAMETER SOLIDS
6.4 mm (1/4")

ELASTOMER OPTIONS

Material	Temperature Limits
Buna-N®	-12.2 (+10) to +65.6 (+150) °C (F°)
Neoprene	-17.8 (+0) to +93.3 (+200) °C (F°)
Nordel®	-51.1 (-60) to +137.8 (+280) °C (F°)
Polyurethane	-12.2 (+10) to +65.6 (+150) °C (F°)
Saniflex™	-28.9 (+20) to +104.4 (+220) °C (F°)
Tetra-Flex™	+4.4 (+40) to +104.4 (+220) °C (F°)
Teflon® PTFE	+4.4 (+40) to +104.4 (+220) °C (F°)
Viton®	-40 (-40) to +176.7 (+350) °C (F°)
Wil-Flex™	-40 (-40) to +107.2 (+225) °C (F°)

DXF DRAWINGS (CAD REQUIRED)

PX800 Stainless Steel	876 k
PX800 Aluminum	836 k

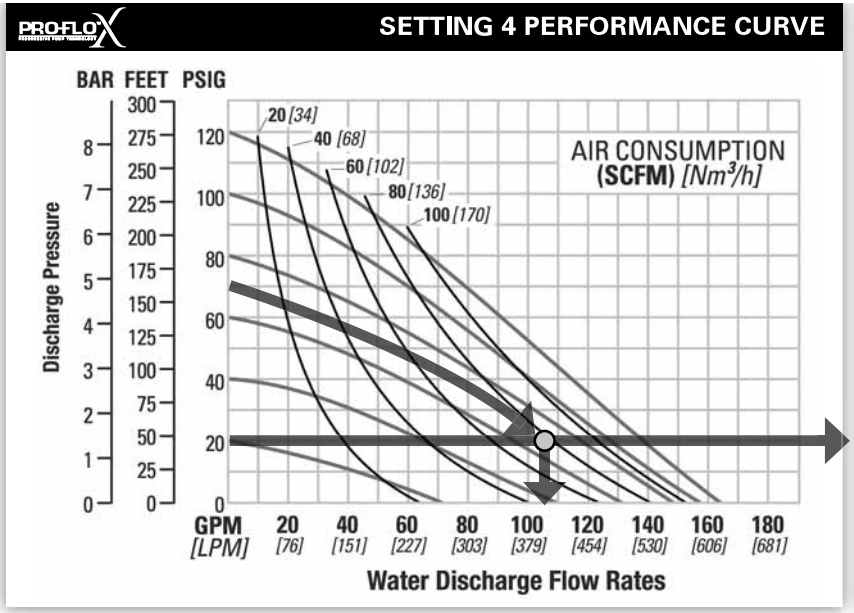
ENGINEERING OPERATION & MAINTENANCE MANUAL

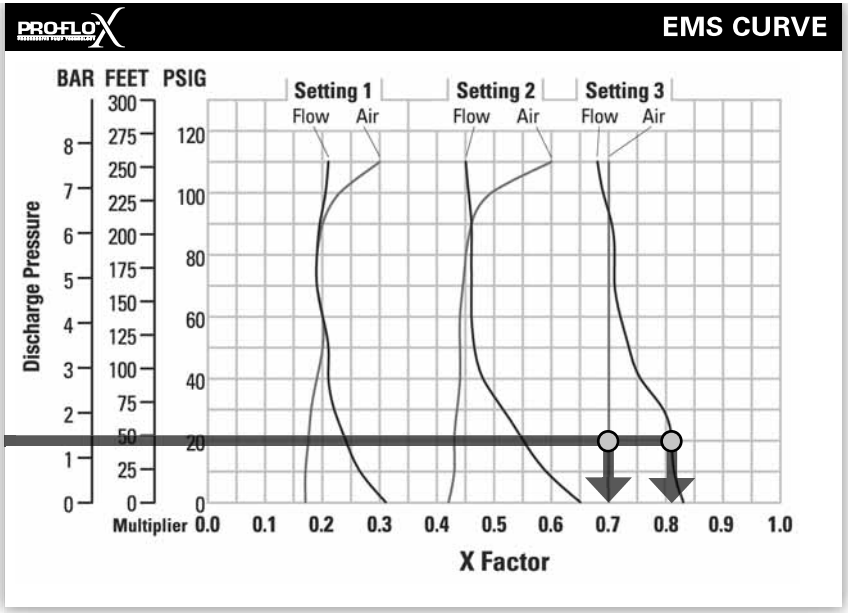
P800-PX800-ADV-MTL-PERF.pdf	1067 k
P800-PX800-ADV-MTL-EOM.pdf	3424 k

BLACK & WHITE FLYERS (PDF FILE)

Pro-Flo X Flyer.pdf	456 k

PX800 METAL PTFE-FITTED





TECHNICAL DATA

Height	668 mm (26.3")
Width	404 mm (15.9")
Depth	340 mm (13.4")
Ship Weight	Aluminum 35 kg (78 lbs.)
	316 Stainless Steel 53 kg (117 lbs.)
	Cast Iron 49 kg (109 lbs.)
	Alloy C 54 kg (119 lbs.)
Air Inlet	19 mm (3/4")
Inlet	51 mm (2")
Outlet	51 mm (2")
Suction Lift	4.5 m Dry (14.8')
	8.7 m Wet (28.4')
Disp. Per Stroke	1.9 l (0.51 gal.)[1]
Max. Flow Rate	617 lpm (163 gpm)
Max. Size Solids	6.4 mm (1/4")

[1]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 PX800 metal, PTFE-fitted pump operating at EMS setting 4, achieved a flow rate of 401 lpm (106 gpm) using 133 Nm^3/h (78 scfm) of air when run at 4.8 bar (70 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 0.82 and the air "X factor" is 0.70 (see dots on EMS curve).

Multiplying the original setting 4 values by the "X factors" provides the setting 3 flow rate of 329 lpm (87 gpm) and an air consumption of 93 Nm^3/h (55 scfm). The flow rate was reduced by 18% while the air consumption was reduced by 30%, 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.

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