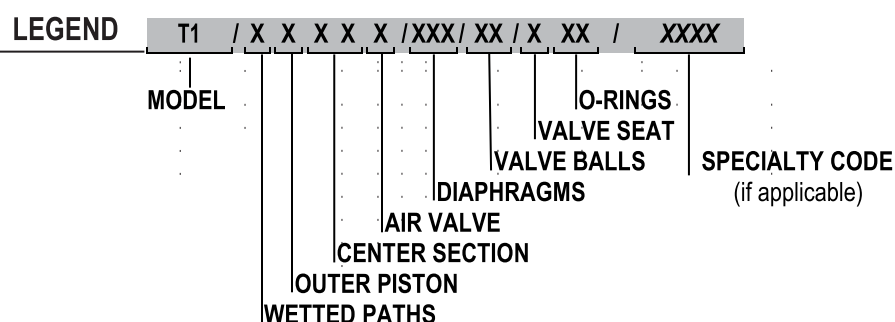


WILDEN PUMP DESIGNATION SYSTEM

**13 mm (1/2") Pump
Maximum Flow Rate:
54.9 lpm (14.5 gpm)**



MATERIAL CODES

MODEL T1 = 13 MM (1/2")	DIAPHRAGMS BNS = BUNA-N (Red Dot) FSS = SANIFLEX™ [Hytrel® (Cream)] PUS = POLYURETHANE (Clear) THU = PTFE W/HIGH-TEMP BUNA-N BACK-UP (White) TNL = PTFE W/NEOPRENE BACK-UP O-RING, IPD (White) TNU = PTFE W/NEOPRENE BACK-UP (White) TSU = PTFE W/SANIFLEX™ BACK-UP (White) VTS = FKM® (White Dot) WFS = WIL-FLEX™ [Santoprene® (Orange Dot)] XBS = CONDUCTIVE BUNA-N (Two Red Dots)	VALVE BALLS BN = BUNA-N (Red Dot) FS = SANIFLEX™ [Hytrel® (Cream)] PU = POLYURETHANE (Brown) TF = PTFE (White) VT = FKM (White Dot) WF = WIL-FLEX™ [Santoprene® (Orange Dot)]
WETTED PATH A = ALUMINUM		VALVE SEATS A = ALUMINUM H = ALLOY C S = STAINLESS STEEL VT = FKM® (White Dot)
OUTER PISTON A = ALUMINUM Z = NO PISTON		VALVE SEATS O-RINGS BN = BUNA-N FS = SANIFLEX™ [Hytrel® (Cream)] PU = POLYURETHANE (Brown) TF = PTFE WF = WIL-FLEX™ [Santoprene®]
AIR VALVE B = BRASS		

SPECIALTY CODES

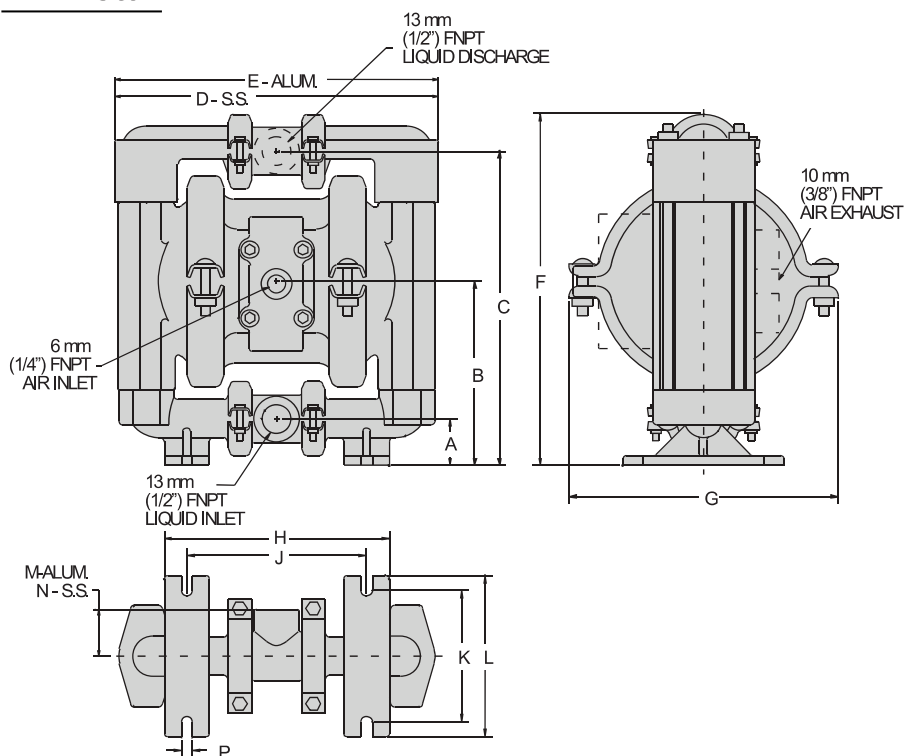
0014 BSPT

Hytrel® is a registered trademark of DuPont Dow Elastomers.

Section 4

DIMENSIONAL DRAWING

T1 Metal



DIMENSIONS

ITEM	METRIC (mm)	STANDARD (inch)
A	28	1.1
B	117	4.6
C	198	7.8
D	203	8.0
E	208	8.2
F	224	8.8
G	175	6.9
H	140	5.5
J	112	4.4
K	84	3.3
L	102	4.0
M	30	1.2
N	30	1.2
P	8	0.3

BSP threads available for liquid inlet and discharge.

Section 5

PERFORMANCE

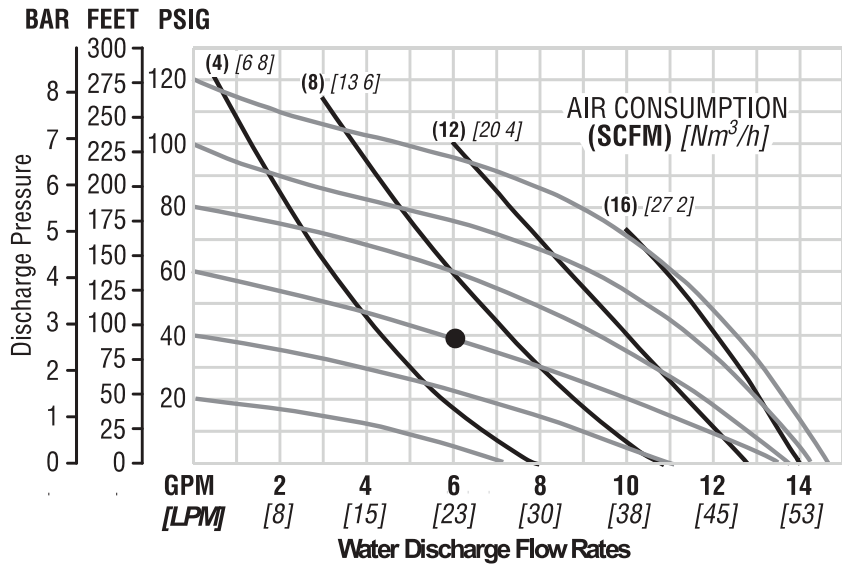
T1 METAL RUBBER-FITTED

Height 224 mm (8.8")
Width 208 mm (8.2")
Depth 178 mm (7.0")
Est. Ship Weight..... Aluminum 6 kg (13 lb)
Stainless Steel 9 kg (20 lb)
Air Inlet..... 6 mm (1/4")
Inlet..... 13 mm (1/2")
Outlet 13 mm (1/2")
Suction Lift 1.22 m Dry (4')
9.14 m Wet (30')
Disp. Per Stroke¹..... 0.06 l (0.017 gal.)
Max. Flow Rate..... 54.9 lpm (14.5 gpm)
Max. Size Solids..... 1.6 mm (1/16")

¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 22.7 lpm (6.0 gpm) against a discharge pressure head of 2.7 bar (40 psig) requires 4 bar (60 psig) and 10.2 Nm³/h (6 scfm) air consumption. (See dot on chart.).

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



Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

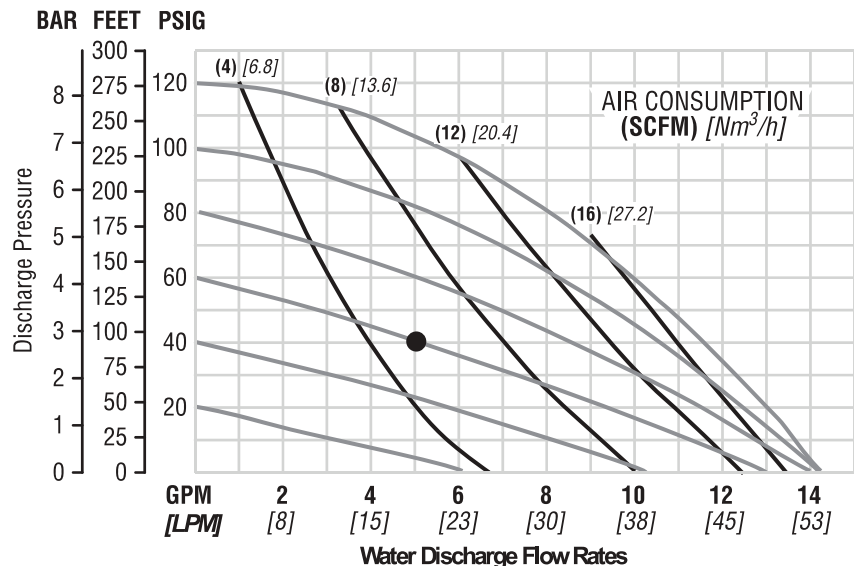
T1 METAL TPE-FITTED

Height 224 mm (8.8")
Width 208 mm (8.2")
Depth 178 mm (7.0")
Est. Ship Weight..... Aluminum 6 kg (13 lb)
Stainless Steel 9 kg (20 lb)
Air Inlet..... 6 mm (1/4")
Inlet..... 13 mm (1/2")
Outlet 13 mm (1/2")
Suction Lift 1.52 m Dry (5')
9.45 m Wet (31')
Disp. Per Stroke¹..... 0.06 l (0.017 gal.)
Max. Flow Rate..... 54.1 lpm (14.3 gpm)
Max. Size Solids..... 1.6 mm (1/16")

¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 18.9 lpm (5.0 gpm) against a discharge pressure head of 2.7 bar (40 psig) requires 4 bar (60 psig) and 8.5 Nm³/h (5 scfm) air consumption. (See dot on chart.).

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



Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

PERFORMANCE

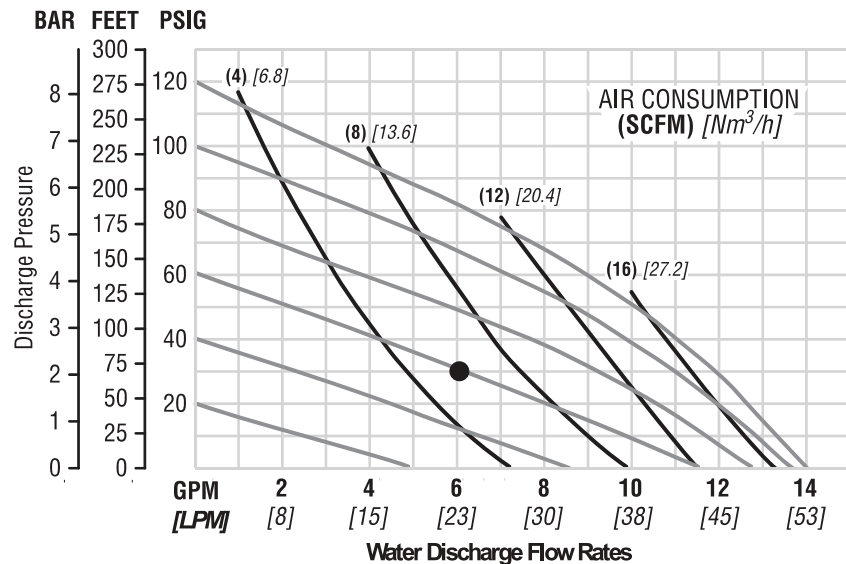
T1 METAL PTFE-FITTED

Height 224 mm (8.8")
 Width 208 mm (8.2")
 Depth 178 mm (7.0")
 Est. Ship Weight..... Aluminum 6 kg (13 lb)
 Stainless Steel 9 kg (20 lb)
 Air Inlet..... 6 mm (1/4")
 Inlet..... 13 mm (1/2")
 Outlet 13 mm (1/2")
 Suction Lift 2.74 m Dry (1')
 9.14 m Wet (30')
 Disp. Per Stroke¹..... 0.05 l (0.014 gal.)
 Max. Flow Rate..... 53.0 lpm (14.0 gpm)
 Max. Size Solids..... 1.6 mm (1/16")

¹Displacement per stroke was calculated at 4.8 bar (70 psig) air inlet pressure against a 2 bar (30 psig) head pressure.

Example: To pump 22.7 lpm (6 gpm) against a discharge pressure head of 2 bar (30 psig) requires 4 bar (60 psig) and 10.2 Nm³/h (6 scfm) air consumption. (See dot on chart.).

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



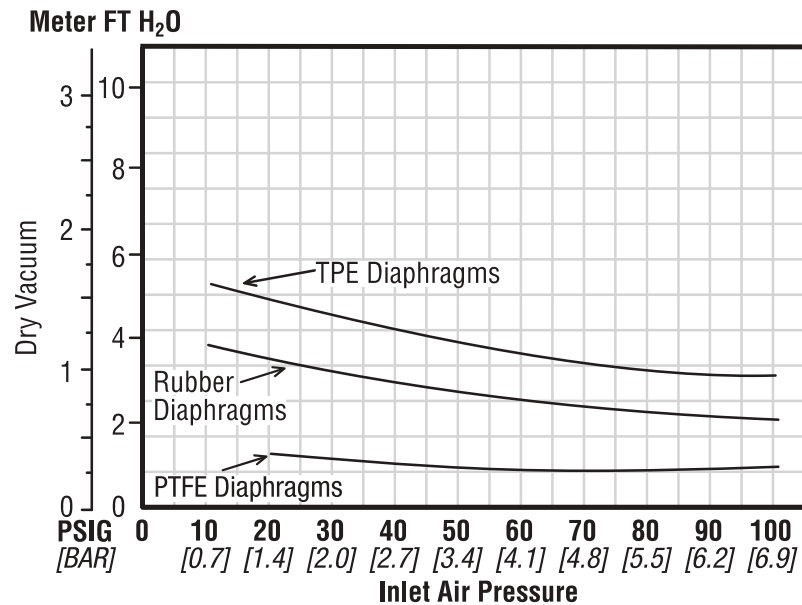
Flow rates indicated on chart were determined by pumping water.

For optimum life and performance, pumps should be specified so that daily operation parameters will fall in the center of the pump performance curve.

SUCTION LIFT CURVES

T1 METAL SUCTION-LIFT CAPABILITY

Suction lift curves are calibrated for pumps operating at 305 m (1,000') above sea level. This chart is meant to be a guide only. There are many variables which can affect your pump's operating characteristics. The number of intake and discharge elbows, viscosity of pumping fluid, elevation (atmospheric pressure) and pipe friction loss all affect the amount of suction lift your pump will attain.



These vacuum numbers will double when a small amount of back pressure is placed on the discharge.