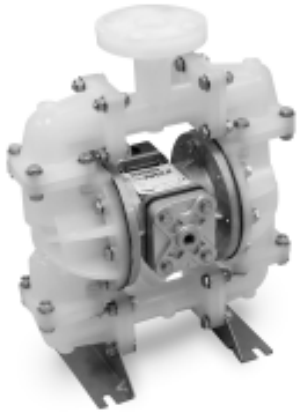
WARREN RUPP®

Quality System ISO9001 Certified

Environmental Management System ISO14001 Certified

IDEX CORPORATION



U.S. Patent #5,851,109; 5,996,627; 400,210; 6,241,487
Other U.S. Patents Applied for

CE

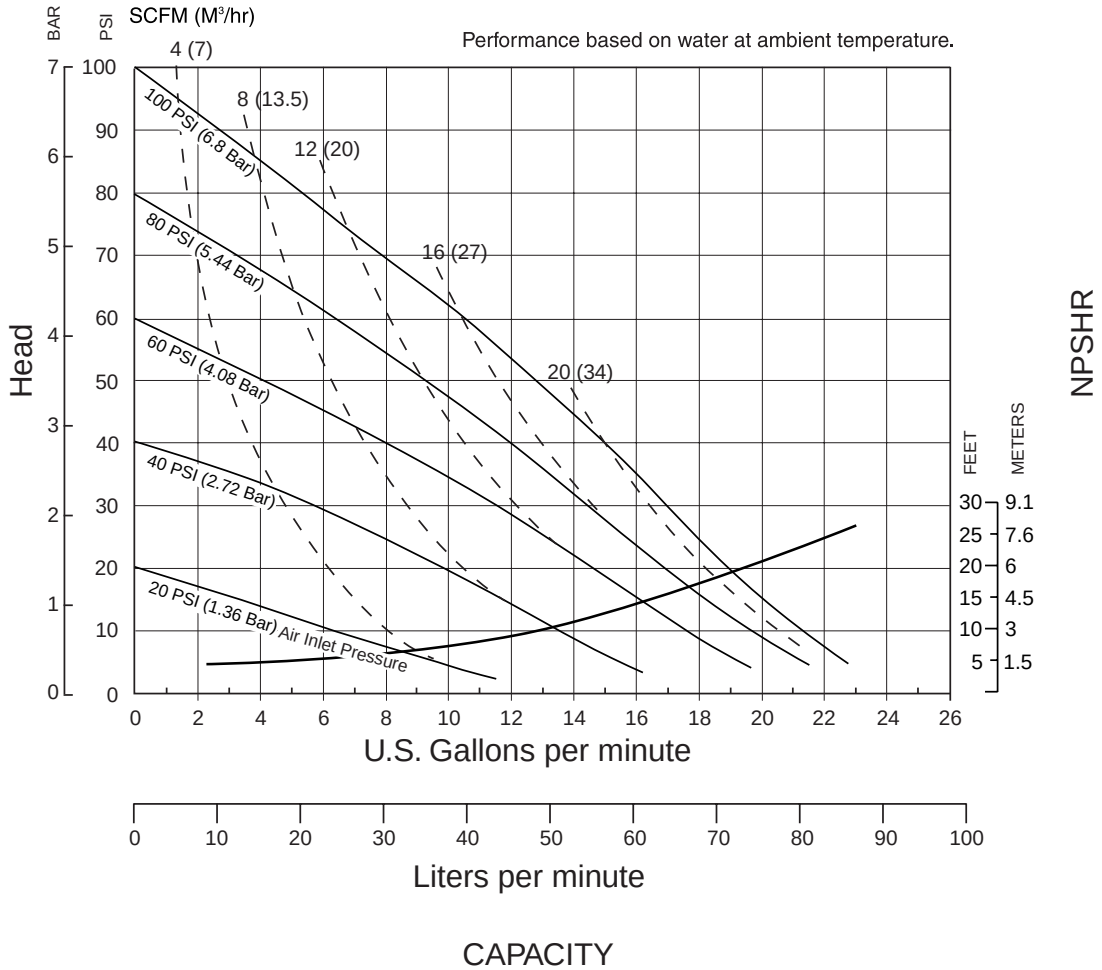
MARATHON II®

M10 Non-Metallic Design Level 1 Ball Valve

Air-Powered Double-Diaphragm Pump

ENGINEERING, PERFORMANCE & CONSTRUCTION DATA

INTAKE/DISCHARGE PIPE SIZE	CAPACITY	AIR VALVE	SOLIDS-HANDLING	HEADS UP TO	DISPLACEMENT/STROKE
Intake: 1" ANSI Flange / Discharge: 1" ANSI Flange	0 to 23 gallons per minute (0 to 87 liters per minute)	No-lube, no-stall design	Up to .15 in. (4mm)	100 psi or 231 ft. of water (7 bar or 70 meters)	.026 Gallon / .098 liter



CAPACITY

Marathon II® pumps are designed to be powered only by compressed air.

Explanation of Pump Nomenclature

M10 Non-Metallic · Design Level 1· Ball Valve

MODEL	Pump Brand	Pump Size	Check Valve Type	Design Level	Wetted Material	Diaphragm/ Check Valve Materials	Check Valve Seat	Non-Wetted Material Options	Porting Options	Pump Style	Pump Options	Shipping Kit Options	Weight lbs. (kg)
M10B1P1PPAS000.	M	10	B	1	P	1	P	P	N	S	0	00.	17 (8)
M10B1P2PPAS000.	M	10	B	1	P	2	P	P	N	S	0	00.	17 (8)
M10B1K1KPAS000.	M	10	B	1	K	1	K	P	N	S	0	00.	21 (9.5)
M10B1K2KPAS000.	M	10	B	1	K	2	K	P	N	S	0	00.	21 (9.5)
M10B1N1NPAS000.	M	10	B	1	N	1	N	P	N	S	0	00.	18 (9)
M10B1N2NPAS000.	M	10	B	1	N	2	N	P	N	S	0	00.	18 (9)

Pump Brand
M= Marathon II®

Pump Size
10= 1"

Check Valve Type
B= Ball
T= Tihedral

Design Level
1= Design Level

Wetted Material
K= PVDF
N= Nylon
P= Polypropylene

Diaphragm/Check Valve Materials
1= Santoprene/Santoprene
2= Virgin PTFE-Santoprene Backup/Virgin PTFE
7= Santoprene/Buna
8= Virgin PTFE-Santoprene Backup.Viton

Check Valve Seat
K= PVDF
N= Nylon
P= Polypropylene

Non-Wetted Material Options
P= Polypropylene
I= Polypropylene with PTFE Hardware

Porting Options
A= ANSI Flange
N= NPT Threads
1= Dual Porting (NPT)
2= Top Dual Porting (NPT)
3= Bottom Dual Porting (NPT)
4= Dual Porting (BSP)
5= Top Dual Porting (BSP)
6= Bottom Dual Porting (BSP)
B= BSP Threads

Pump Style
S= Standard

Pump Options
0= None
2= Mesh Muffler

Kit Options
00.= None
P0.= 10-30VDC Pulse Otput Kit
P1.= Intrinsically-Safe 10-30VDC Pulse Output Kit
P2.= 110/120 or 220/240VAC Pulse Output Kit
P3.= Intrinsically-Safe 110/ 120VAC Pulse Output Kit
P4.= Intrinsically-Safe 220/240VAC Pulse Output Kit
E0.= Solenoid Kit with 24VDC Coil
E1.= Solenoid Kit 24VDC Explosion-Proof Coil
E2.= Solenoid Kit with 24VAC/12VDC Coil
E3.= Solenoid Kit with 24VAC/12VDC Explosion-Proof Coil
E4.= Solenoid Kit with 110VAC Coil
E5.= Solenoid Kit with 110VAC Explosion-Proof Coil
E6.= Solenoid Kit with 220VAC Coil
E7.= Solenoid Kit with 220VAC Explosion-Proof Coil
SP= Stroke Indicator Pins

CAUTION! ***Operating temperature limitations are as follows:***

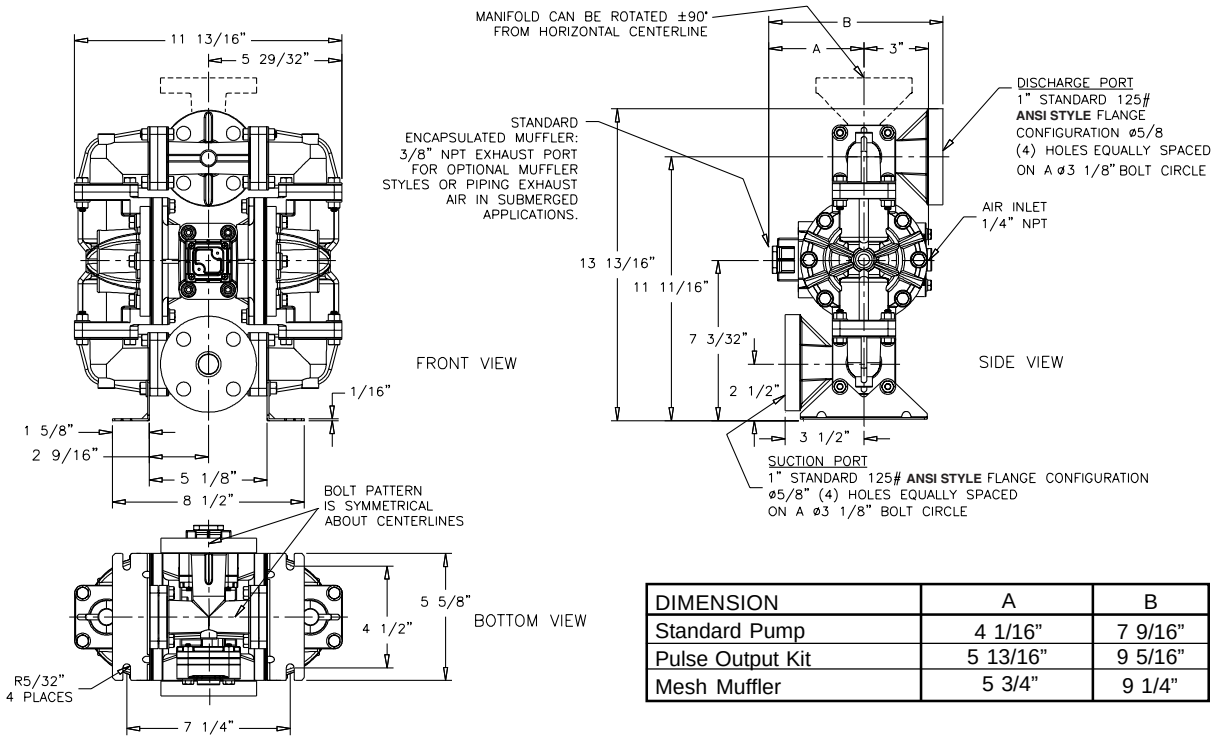
Materials	Operating Temperatures Maximum*	Minimum*	Optimum**
Santoprene® Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	212°F 100°C	-10°F -23°C	50°F to 212°F 10°C to 100°C
Virgin PTFE Chemically inert, virtually impervious. Very few chemicals are known to react chemically with PTFE: molten alkali metals, turbulent liquid or gaseous fluorine and a few fluoro-chemicals such as chlorine trifluoride or oxygen difluoride which readily liberate free fluorine at elevated temperatures.	212°F 100°C	-35°F -37°C	50°F to 212°F 10°C to 100°C
PVDF	200°F -93°C	-10°F -13°C	
Polypropylene	150°F 65°C	-40°F 5°C	
Polyutethane	210°F 99°C	-40°F -40°C	-40°F to 210°F -40°C to 99°C
Nylon	120°F 48°C	32°F 0°C	

For specific applications, always consult "Chemical Resistance Chart" Technical Bulletin

*Definite reduction in service life.
**Minimal reduction in service life at ends of range.

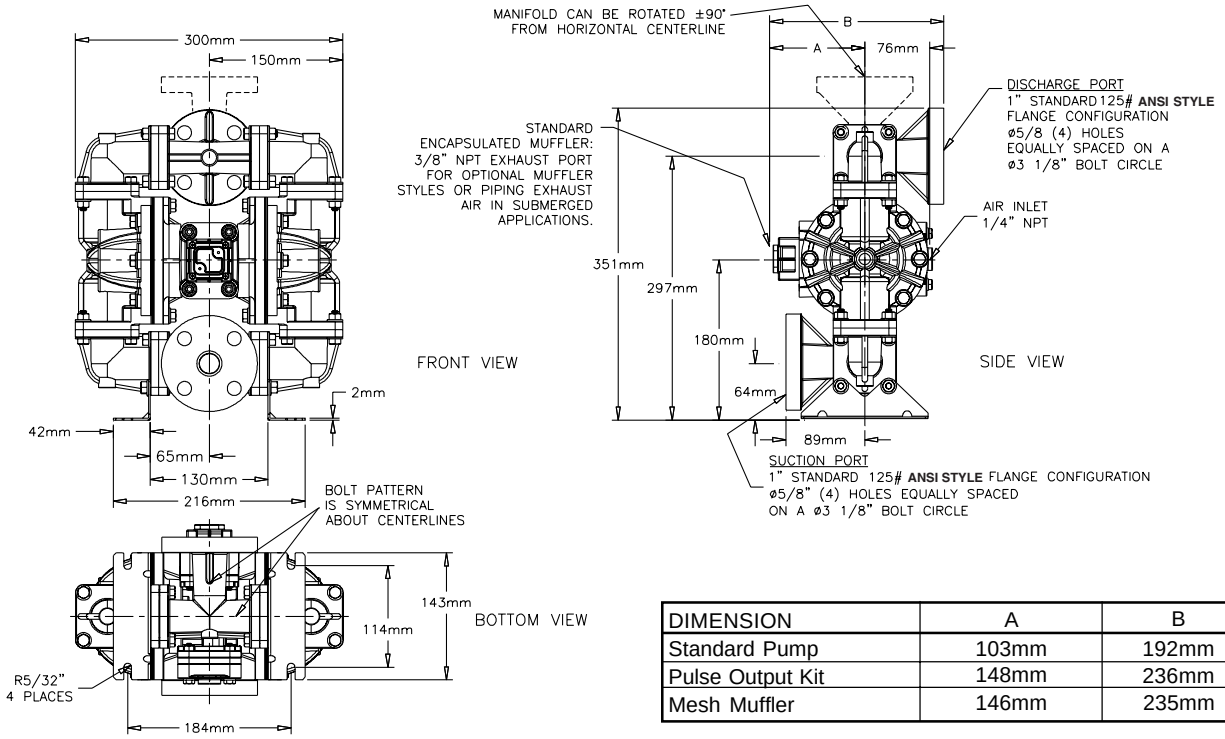
Dimensions: M10 Non-Metallic

Dimensions in Inches
Dimensional Tolerance:±1/8"



DIMENSION	A	B
Standard Pump	4 1/16"	7 9/16"
Pulse Output Kit	5 13/16"	9 5/16"
Mesh Muffler	5 3/4"	9 1/4"

Dimensions in Millimeters
Dimensional Tolerance:± 3mm



DIMENSION	A	B
Standard Pump	103mm	192mm
Pulse Output Kit	148mm	236mm
Mesh Muffler	146mm	235mm