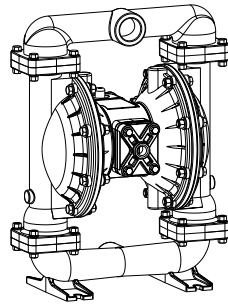


**WARREN
RUPP®**

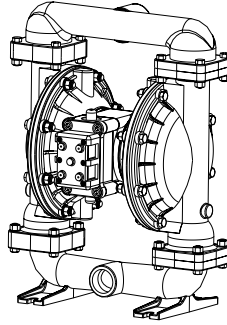
Quality System
ISO9001 Certified

Environmental
Management System
ISO14001 Certified

IDEX
IDEX CORPORATION



Air Inlet
Side View



Air Exhaust
Side View

U.S. Patent #5,996,627
Other U.S. Patents Applied for

MARATHON II®

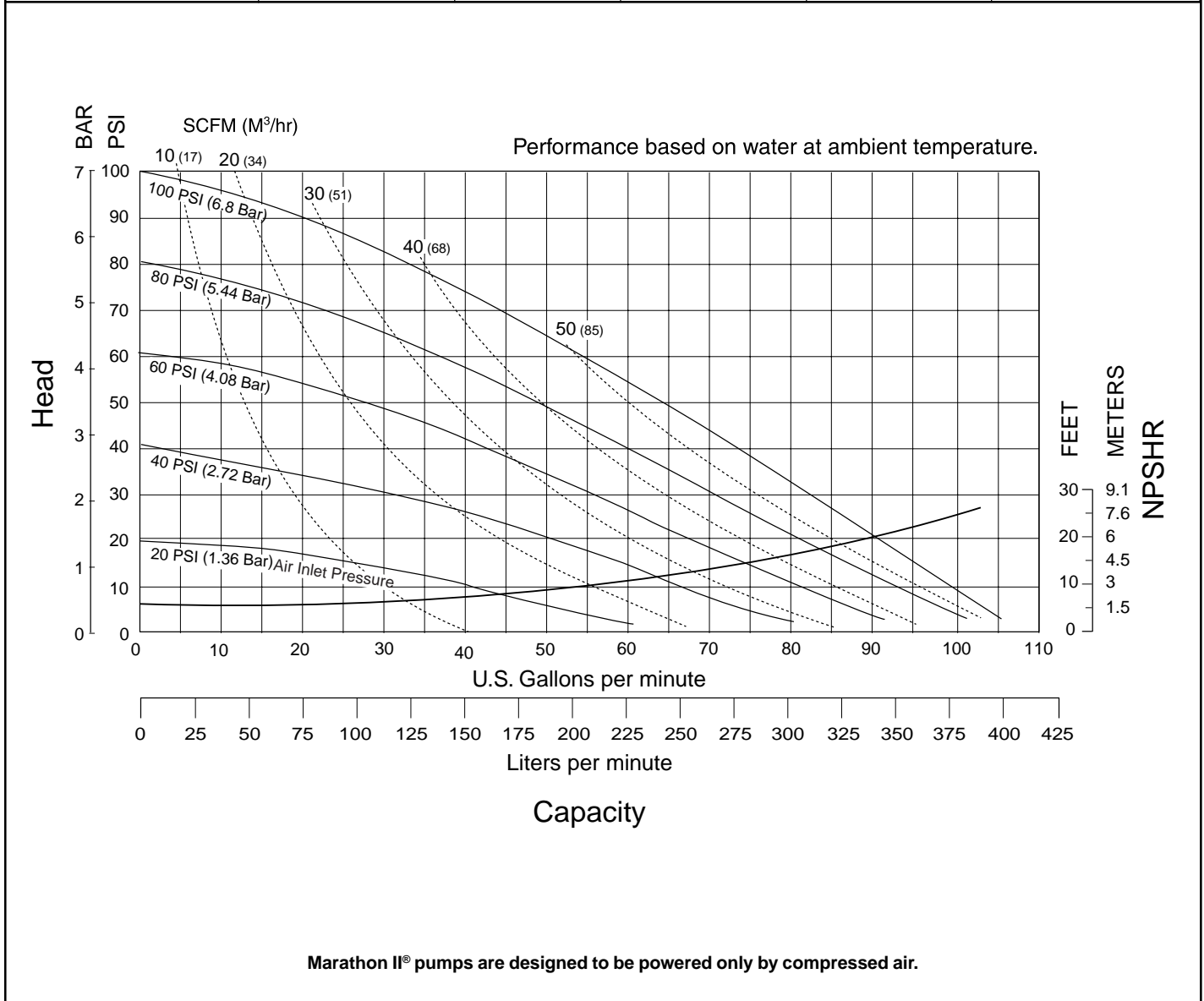
M15 Metallic Design Level I Ball Valve

Air-Powered Double-Diaphragm Pump

ENGINEERING, PERFORMANCE
& CONSTRUCTION DATA



| INTAKE/DISCHARGE PIPE SIZE | CAPACITY | AIR VALVE | SOLIDS-HANDLING | HEADS UP TO | DISPLACEMENT/STROKE |
|--|---|-----------------------------|---------------------|--|-------------------------|
| 1½" NPT(internal) 1½" BSPT Tapered (internal) | 0 to 106 gallons per minute (0 to 401 liters per minute) | No-lube, no-stall design | Up to .25 in. (6mm) | 125 psi or 289 ft. of water (8.6 Kg/cm² or 86 meters) | .41 Gallon / 1.55 liter |



Explanation of Pump Nomenclature

M15 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) |
|-----------------|------------|-----------|------------------|--------------|-----------------|---------------------------------|------------------|-----------------------------|-----------------|------------|--------------|----------------------|------------------|
| M15B1ABWANS000. | M | 15 | B | 1 | A | B | W | A | N | S | 0 | 00. | 53 (24) |
| M15B1ACTANS000. | M | 15 | B | 1 | A | C | T | A | N | S | 0 | 00. | 53 (24) |
| M15B1AEWANS000. | M | 15 | B | 1 | A | E | W | A | N | S | 0 | 00. | 53 (24) |
| M15B1AGTANS000. | M | 15 | B | 1 | A | G | T | A | N | S | 0 | 00. | 53 (24) |
| M15B1ANWANS000. | M | 15 | B | 1 | A | N | W | A | N | S | 0 | 00. | 53 (24) |
| M15B1A1WANS000. | M | 15 | B | 1 | A | 1 | W | A | N | S | 0 | 00. | 53 (24) |
| M15B1AVWANS000. | M | 15 | B | 1 | A | V | W | A | N | S | 0 | 00. | 53 (24) |
| M15B1BWANS000. | M | 15 | B | 1 | I | B | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1CTANS000. | M | 15 | B | 1 | I | C | T | A | N | S | 0 | 00. | 93 (42) |
| M15B1IEWANS000. | M | 15 | B | 1 | I | E | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1IGTANS000. | M | 15 | B | 1 | I | G | T | A | N | S | 0 | 00. | 93 (42) |
| M15B1INWANS000. | M | 15 | B | 1 | I | N | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1I1WANS000. | M | 15 | B | 1 | I | 1 | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1IVWANS000. | M | 15 | B | 1 | I | V | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1IEWANS000. | M | 15 | B | 1 | I | E | W | A | N | S | 0 | 00. | 93 (42) |
| M15B1SBWANS000. | M | 15 | B | 1 | S | B | W | A | N | S | 0 | 00. | 95 (43) |
| M15B1SCTANS000. | M | 15 | B | 1 | S | C | T | A | N | S | 0 | 00. | 95 (43) |
| M15B1SGTANS000. | M | 15 | B | 1 | S | G | T | A | N | S | 0 | 00. | 95 (43) |
| M15B1SNWANS000. | M | 15 | B | 1 | S | N | W | A | N | S | 0 | 00. | 95 (43) |
| M15B1S1WANS000. | M | 15 | B | 1 | S | 1 | W | A | N | S | 0 | 00. | 95 (43) |
| M15B1SVWANS000. | M | 15 | B | 1 | S | V | W | A | N | S | 0 | 00. | 95 (43) |

Pump Brand

M=Marathon II®

Pump Size

15=1½"

Check Valve Type

B=Ball

Design Level

1= Design Level

Wetted Material

A= Aluminum
I = Cast Iron
S= Stainless Steel

Diaphragm Check Valve Materials

1= Santoprene/Santoprene
B= Buna/Buna
C= Viton/ PTFE
E=EPDM/EPDM
G=PTFE -Neoprene/PTFE
N= Neoprene/Neoprene
V=Viton/Viton

Check Valve Seat

A= Aluminum
C= Carbon Steel
S= Stainless Steel
T= PTFE
W= UHMW Polyethylene

Non-Wetted Material Options

A= Painted Aluminum
I= Cast Iron
J= Painted Aluminum
w/PTFE Coated Hardware
Y= Painted Aluminum
w/ Stainless Steel Hardware
Z= Cast Iron with Stainless Steel
Hardware

Porting Options

N= NPT Threads
B= BSPT (Tapered) Threads

Pump Style

S= Standard

Pump Options

0= None
1= 3M Muffler
2= Mesh Muffler
3= High temperature Air Valve
w/Encapsulated Muffler
4= High temperature Air Valve
w/3M Muffler
5= High temperature Air Valve
w/Mesh Muffler

Kit Options

00.=None
P0.=0-30VDC Pulse Output 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
SP.=Stroke Indicator Pins

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

| Materials | Operating Temperatures | | |
|---|------------------------|----------------|--------------------------------|
| | Maximum* | Minimum* | Optimum** |
| Buna General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons. | 190°F 88°C | -10°F -23°C | 50° to 140°F 10°C to 60°C |
| EPDM Shows very good water and chemical resistance. Has poor resistance to oil and solvents, but is fair in ketones and alcohols. | 212°F 100°C | -10°F -23°C | 50° to 212°F 10°C to 100°C |
| Neoprene All purpose. Resistant to vegetable oil. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizing acids, ketones, esters, nitro hydrocarbons and chlorinated aromatic hydrocarbons. | 170°F 77°C | -10°F -23°C | 50° to 130°F 10°C to 54°C |
| 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° 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 |
| Viton® Shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils. Hot water or hot aqueous solutions (over 70°F) will attack Viton®. | 212°F 100°C | +32°F 0°C | 75°F to 212°F 24°C to 100°C |
| UHMW Polyethylene | 180°F 82°C | -40°F -40°C | 50°F to 140°F 10°C to 60°C |

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

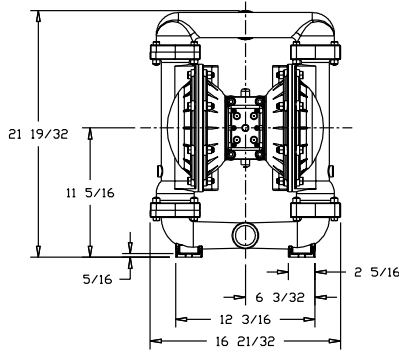
*Definite reduction in service life.

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

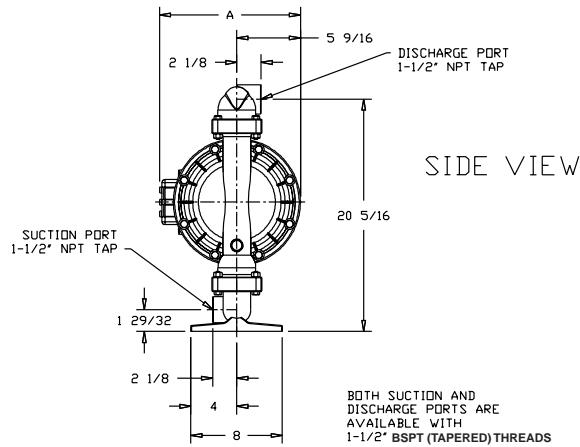
Dimensions: M15 Metallic

Dimensions in Inches

Dimensional Tolerance: $\pm 1/8"$

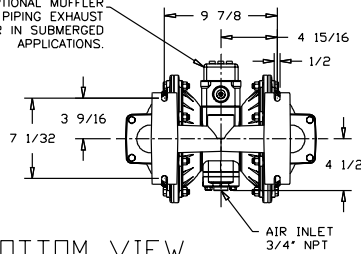


FRONT VIEW



SIDE VIEW

STANDARD ENCAPSULATED MUFFLER
1" NPT EXHAUST PORT
FOR OPTIONAL MUFFLER
STYLES OR PIPING EXHAUST
AIR IN SUBMERGED
APPLICATIONS.

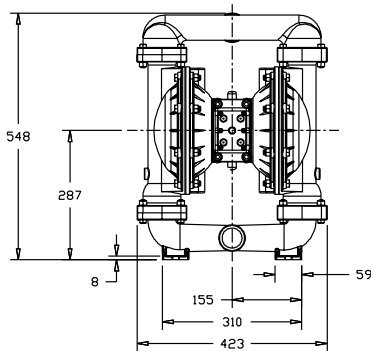


BOTTOM VIEW

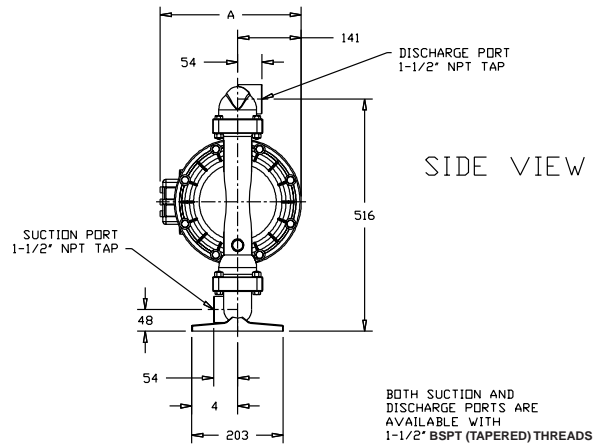
| DIMENSION | A |
|-------------------------|----------|
| Standard Pump | 12 11/32 |
| Pulse Output Kit | 13 23/32 |
| Mesh Muffler | 14 9/32 |
| Sound Dampening Muffler | 18 3/8 |

Dimensions in Millimeters

Dimensional Tolerance: $\pm 3\text{mm}$

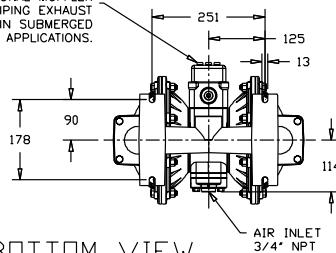


FRONT VIEW



SIDE VIEW

STANDARD ENCAPSULATED MUFFLER
1" NPT EXHAUST PORT
FOR OPTIONAL MUFFLER
STYLES OR PIPING EXHAUST
AIR IN SUBMERGED
APPLICATIONS.



BOTTOM VIEW

| DIMENSION | A |
|-------------------------|-----|
| Standard Pump | 314 |
| Pulse Output Kit | 349 |
| Mesh Muffler | 363 |
| Sound Dampening Muffler | 466 |