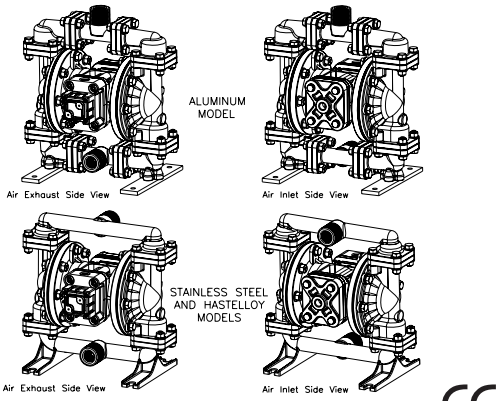
WARREN RUPP®

Quality System ISO9001 Certified

Environmental Management System ISO14001 Certified

IDEX CORPORATION



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

CE

Ex II 2GD b T5

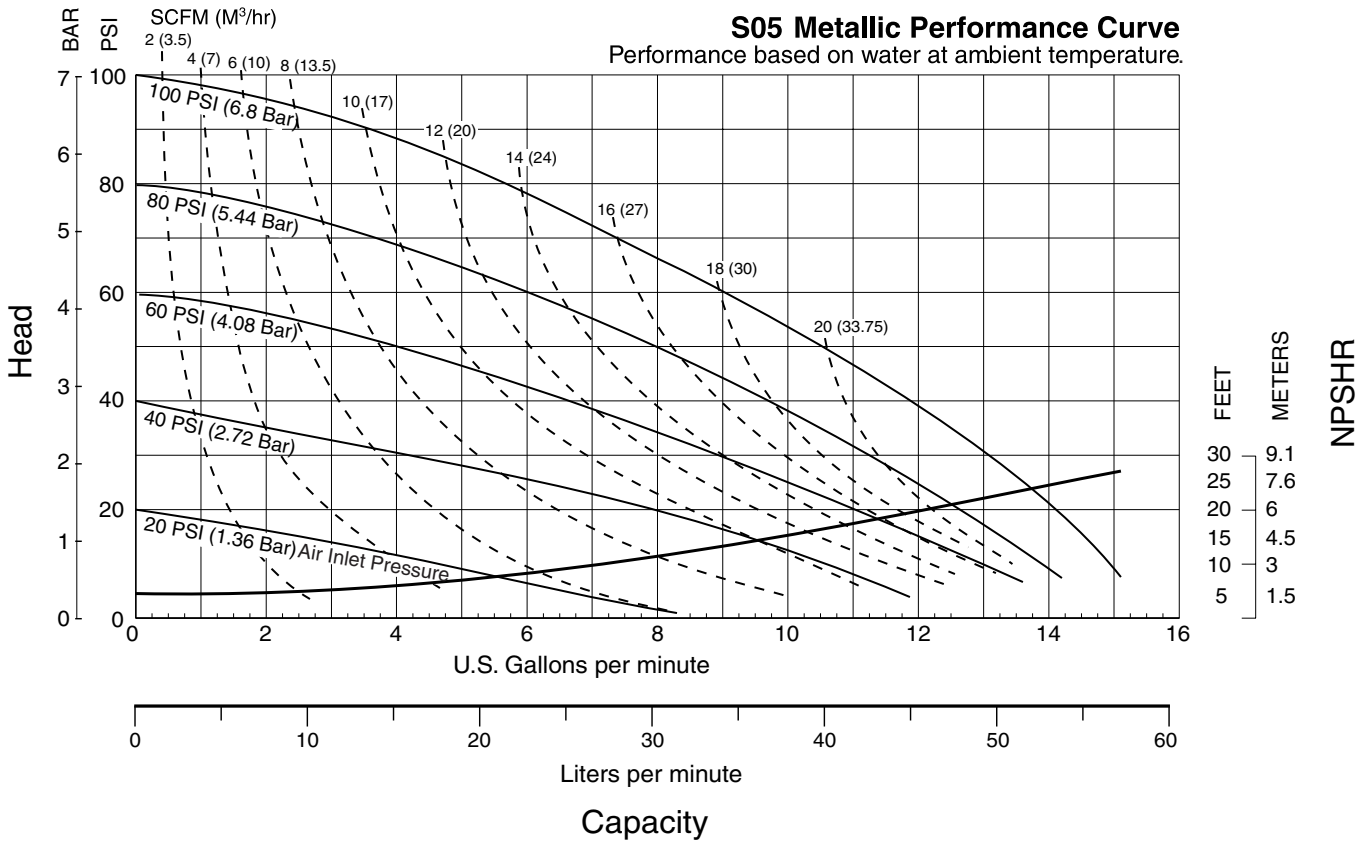
SANDPIPER®
A WARREN RUPP PUMP BRAND

S05 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
½" NPT or ½" BSPT (internal) 1" NPT or 1" BSPT (external)	0 to 15 gallons per minute (0 to 56 liters per minute)	No-lube, no-stall design	Up to .125 in. (3mm)	125 psi or 289 ft. of water (8.6 Kg/cm² or 86 meters)	.026 Gallon / .098 liter



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

Explanation of Pump Nomenclature

S05 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)
S05B1ABWANS000.	S	05	B	1	A	B	W	A	N	S	0	00.	15 (7)
S05B1ACTPANS000.	S	05	B	1	A	C	T	A	N	S	0	00.	15 (7)
S05B1AEWANS000.	S	05	B	1	A	E	W	A	N	S	0	00.	15 (7)
S05B1ANWANS000.	S	05	B	1	A	N	W	A	N	S	0	00.	15 (7)
S05B1AXTANS000.	S	05	B	1	A	X	T	A	N	S	0	00.	15 (7)
S05B1A1WANS000.	S	05	B	1	A	1	W	A	N	S	0	00.	15 (7)
S05B1A2TANS000.	S	05	B	1	A	2	T	A	N	S	0	00.	15 (7)
S05B1SBWANS000.	S	05	B	1	S	B	W	A	N	S	0	00.	21 (10)
S05B1SCTANS000.	S	05	B	1	S	C	T	A	N	S	0	00.	21 (10)
S05B1SEWANS000.	S	05	B	1	S	E	W	A	N	S	0	00.	21 (10)
S05B1SNWANS000.	S	05	B	1	S	N	W	A	N	S	0	00.	21 (10)
S05B1SXTANS000.	S	05	B	1	S	X	T	A	N	S	0	00.	21 (10)
S05B1S1WANS000.	S	05	B	1	S	1	W	A	N	S	0	00.	21 (10)
S05B1S2TANS000.	S	05	B	1	S	2	T	A	N	S	0	00.	21 (10)
S05B1HBWANS000.	S	05	B	1	H	B	W	A	N	S	0	00.	23 (11)
S05B1HCTANS000.	S	05	B	1	H	C	T	A	N	S	0	00.	23 (11)
S05B1HEWANS000.	S	05	B	1	H	E	W	A	N	S	0	00.	23 (11)
S05B1HNWANS000.	S	05	B	1	H	N	W	A	N	S	0	00.	23 (11)
S05B1HXTANS000.	S	05	B	1	H	X	T	A	N	S	0	00.	23 (11)
S05B1H1WANS000.	S	05	B	1	H	1	W	A	N	S	0	00.	23 (11)
S05B1H2TANS000.	S	05	B	1	H	2	T	A	N	S	0	00.	23 (11)

Pump Brand
S=SANDPIPER®

Pump Size
05=½"

Check Valve Type
B=Ball

Design Level
1=Design Level

Wetted Material
A=Aluminum
H=Hastelloy
S=Stainless Steel

Diaphragm Check Ball Materials
1=Santoprene®/Santoprene®
B=Buna/Buna
C=Viton/ PTFE
E=EPDM/EPDM
N=Neoprene/Neoprene
X=UniRupp® PTFE/PTFE
2=PTFE-Santoprene/PTFE

Valve Seat
A=Aluminum
C=Cast Iron
H=Hastelloy
S=Stainless Steel
T=PTFE
W=UHMW Polyethylene

Non-Wetted Material
A=Aluminum

Porting Options
N=NPT Threads
B=BSPT (Tapered) Threads
1= Dual Porting (NPT) (Alum Only)
2= Top Dual Porting (NPT) (Alum Only)
3= Bottom Dual Porting (NPT) (Alum Only)
4= Dual Porting (BSPT) (Alum Only)
5= Top Dual Porting (BSPT) (Alum Only)
6= Bottom Dual Porting (BSPT) (Alum Only)

Pump Style
S= Standard

Pump Options
0= Encapsulated Muffler
1= Sound Dampening Muffler
2= Mesh Muffler
6= Metal 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
E0.=Solenoid Kit with 24VDC Coil
E1.=Solenoid Kit with 24VDC Explosion-Proof Coil
E2.=Solenoid Kit with 24VAC/12 VDC 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

* ⚠ **Note: ATEX compliant pumps must be ordered with a metal muffler** ⚠

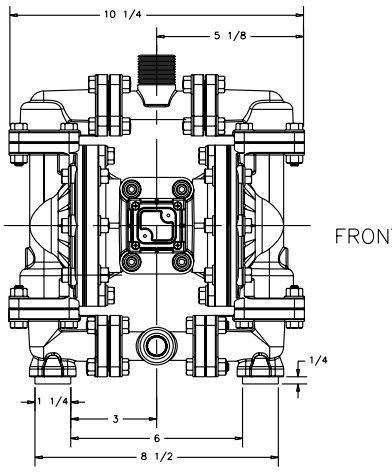
CAUTION! ***Operating temperature limitations are as follows:***

Materials	Operating Temperatures Maximum	Minimum
Buna N 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
EPDM Shows very good water and chemical resistance. Has poor resistance to oil and solvents, but is fair in ketones and alcohols.	280°F 138°C	-40°F -40°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.	200°F 93°C	-10°F -23°C
Santoprene® Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°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.	220°F 104°C	-35°F -37°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.	350°F 177°C	-40°F -40°C
UHMW PE	180°F 82°C	-35°F -37°C
Polypropylene	180°F 82°C	32°F 0°C

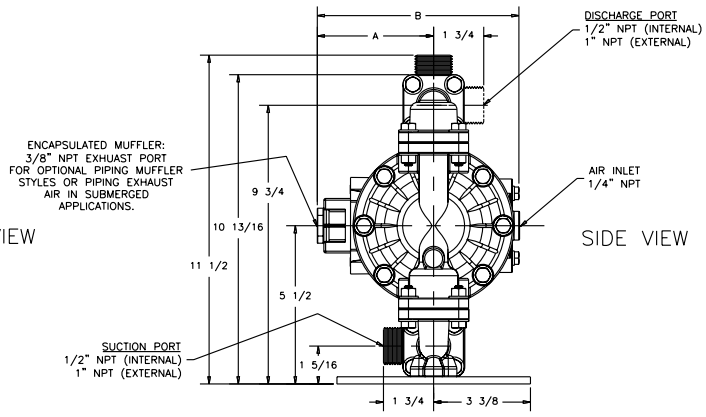
For specific applications, always consult The Warren Rupp Chemical Resistance Chart

Dimensions: S05 Metallic (Aluminum Model)

Dimensions in Inches
Dimensional Tolerance:±1/8"

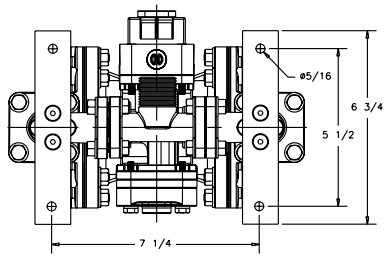


FRONT VIEW



SIDE VIEW

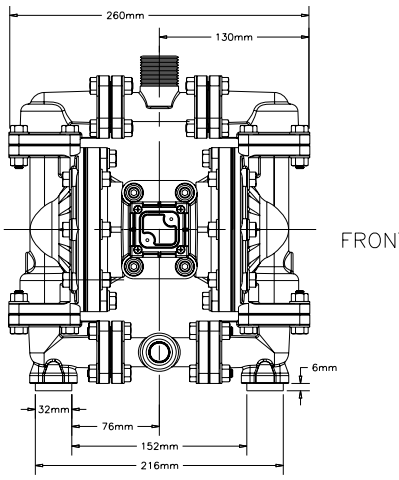
BOTH SUCTION AND DISCHARGE
PORTS ARE AVAILABLE IN
1/2" BSPT (TAPERED INTERNAL)
1" BSPT (TAPERED EXTERNAL)



BOTTOM VIEW

DIMENSION	A	B
Encapsulated Muffler	4 1/16"	7 1/16"
Pulse Output Kit	5 13/16"	8 13/16"
Mesh Muffler	5 3/4"	8 3/4"
Metal Muffler	3 7/16"	6 7/16"

Dimensions in Millimeters
Dimensional Tolerance:± 3mm



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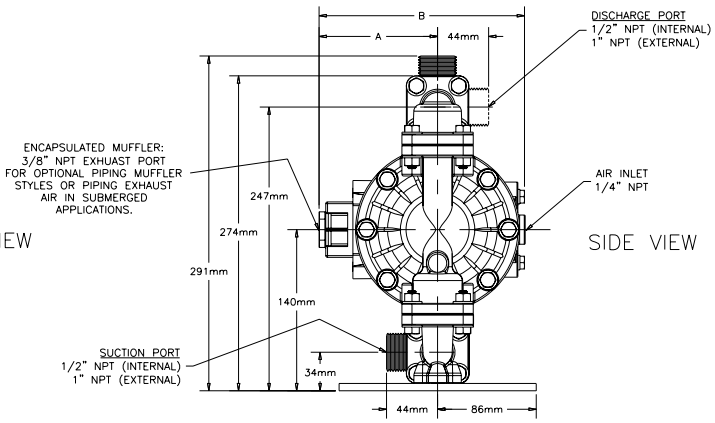

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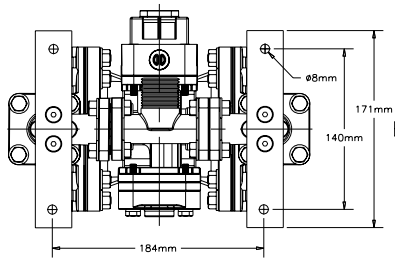
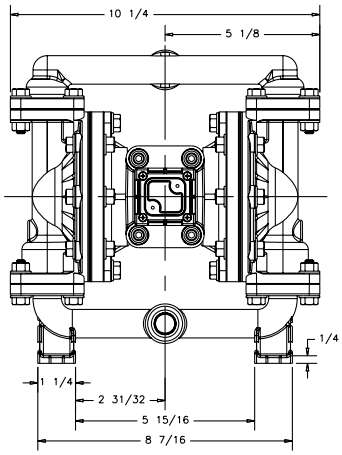


BOTTOM VIEW

DIMENSION	A	B
Encapsulated Muffler	103	179
Pulse Output Kit	148	224
Mesh Muffler	146	222
Metal Muffler	87	16

Dimensions: S05 Metallic (Stainless Steel & Hastelloy Models)

Dimensions in Inches
Dimensional Tolerance:±1/8"



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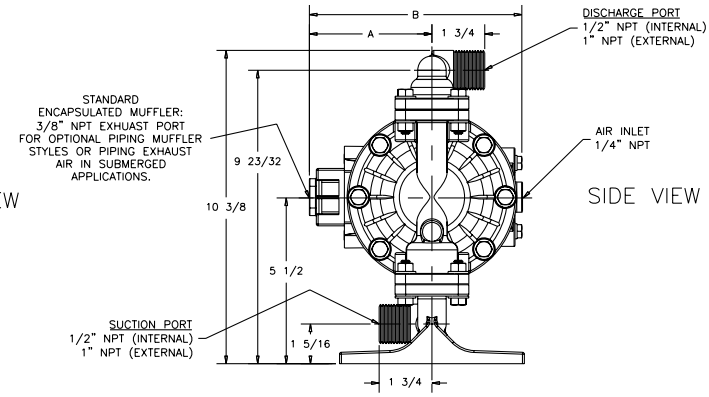

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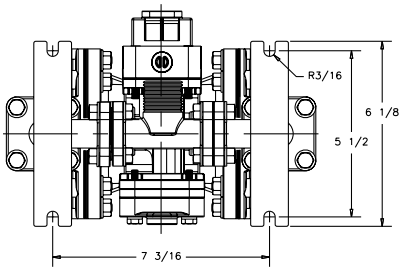
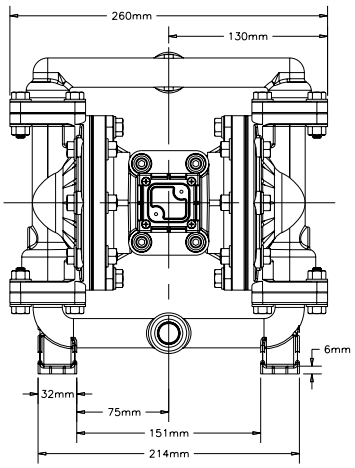


BOTTOM VIEW

DIMENSION	A	B
Encapsulated Muffler	4 1/16"	7 1/16"
Pulse Output Kit	5 13/16"	8 13/16"
Mesh Muffler	4 25/32"	9 17/32"
Metal Muffler	3 7/16"	6 7/16"

Dimensions in Millimeters
Dimensional Tolerance:± 3mm



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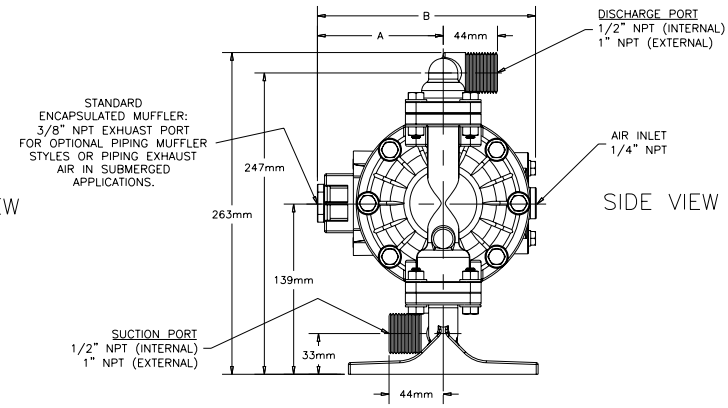

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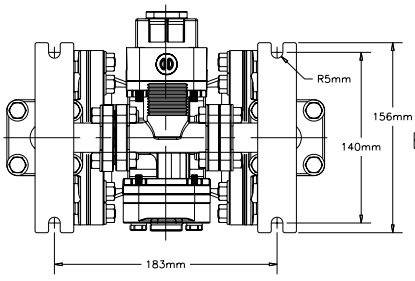

BOTTOM VIEW

DIMENSION	A	B
Encapsulated Muffler	103	179
Pulse Output Kit	148	224
Mesh Muffler	146	197
Metal Muffler	87	164