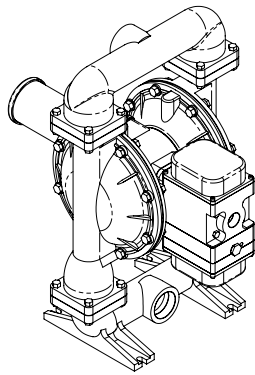


**WARREN
RUPP®**

Quality System
ISO9001 Certified

Environmental
Management System
ISO14001 Certified

IDEX
FLUID & METERING



CE

Ex II 2GD T4

Ex d ib IIB T4 Gb
Ex tb IIIC 135°C Db IP66
-20°C to +40°C
Sira 10ATEX1151X
IECEX SIR 10.0110X

SA 2350863
c US

Class I Div 1 - Groups C,D T4
Class II Div 1 - Groups F,G
Class I Zone 1, Ex d ib IIB T4
Class I Zone 1, AEx d ib IIB T4
Enclosure Type 4X
12 Volt (2 - 8) mA

SANDPIPER®

A WARREN RUPP PUMP BRAND

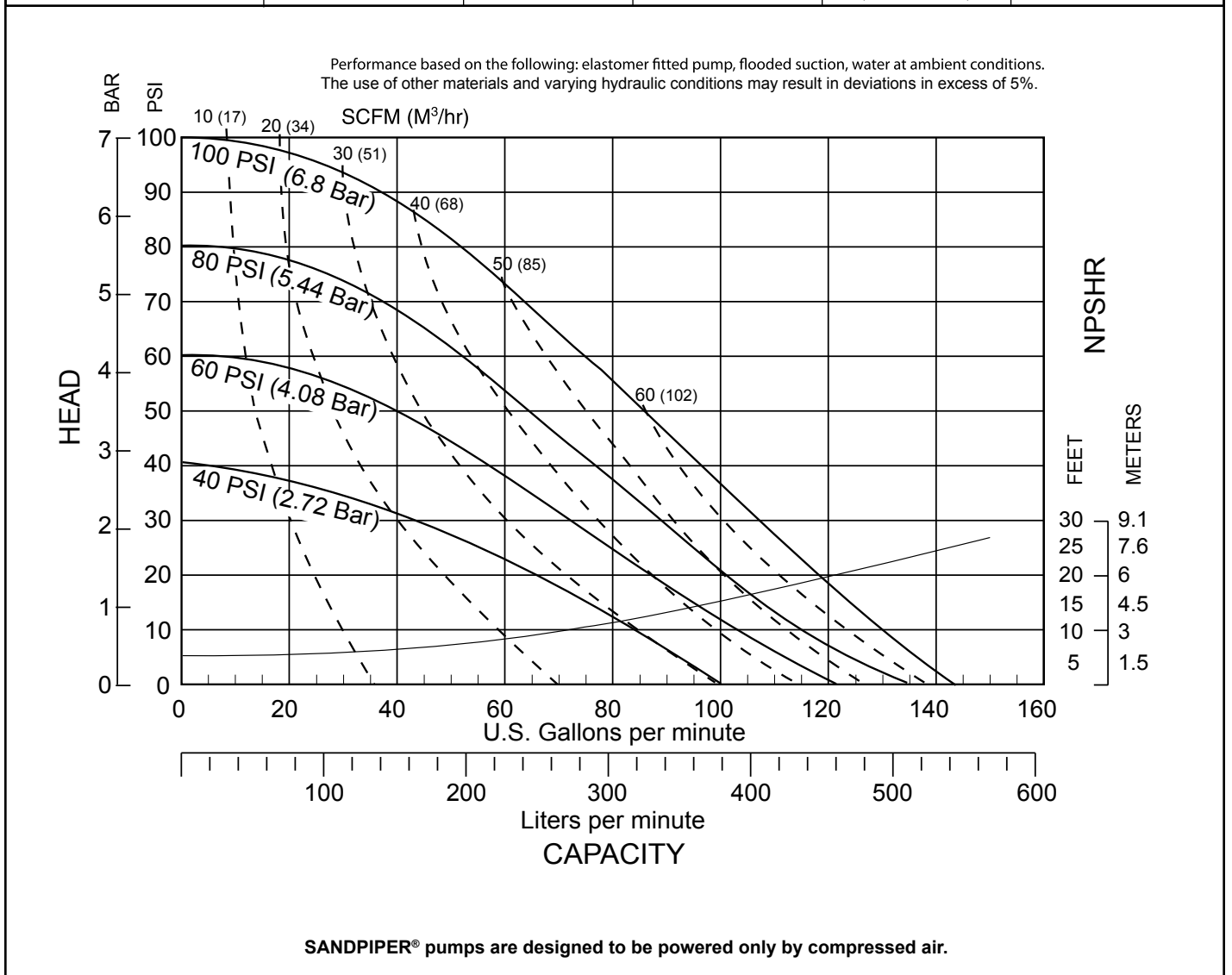
**Hazardous Duty
RS20 Metallic
AirVantage
Design Level 1
Ball Valve**

**Air-Operated
Double Diaphragm Pump**

ENGINEERING, PERFORMANCE
& CONSTRUCTION DATA

US Patent # 6,241,487
US Patent # 7,521,921 Pending

INTAKE/DISCHARGE PIPE SIZE	CAPACITY	AIR VALVE	SOLIDS-HANDLING	HEADS UP TO	DISPLACEMENT/STROKE
2" NPT (internal) 2" BSP Tapered (internal)	0 to 145 gallons per minute (0 to 549 liters per minute)	No-lube, no-stall design	Up to .25 in. (6mm)	125 psi or 289 ft. of water (125 psi or 8.6 bar inlet) (8.6 bar or 88 meters)	.42 Gallon / 1.59 liter



Warren Rupp, Inc. • A Unit of IDEX Corporation • 800 N. Main Street • Mansfield, OH 44901 USA

Tel: 419-524-8388 • Fax: 419-522-7867 • www.warrenrupp.com

Explanation of Pump Nomenclature, Hazardous Duty RS20

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	Kit Options	Shipping Weight lbs. (kg)
RS20B1ABBANASX0	RS	20	B	1	A	B	B	A	N	A	S	X0	91 (41)
RS20B1AEEANASX0	RS	20	B	1	A	E	E	A	N	A	S	X0	91 (41)
RS20B1AGTANASX0	RS	20	B	1	A	G	T	A	N	A	S	X0	91 (41)
RS20B1ANNANASX0	RS	20	B	1	A	N	N	A	N	A	S	X0	91 (41)
RS20B1A1EANASX0	RS	20	B	1	A	1	E	A	N	A	S	X0	91 (41)
RS20B1ACTANASX0	RS	20	B	1	A	C	T	A	N	A	S	X0	91 (41)
RS20B1IBBANASX0	RS	20	B	1	I	B	B	A	N	A	S	X0	157 (71)
RS20B1IEEANASX0	RS	20	B	1	I	E	E	A	N	A	S	X0	157 (71)
RS20B1IGTANASX0	RS	20	B	1	I	G	T	A	N	A	S	X0	157 (71)
RS20B1INNANASX0	RS	20	B	1	I	N	N	A	N	A	S	X0	157 (71)
RS20B1I1EANASX0	RS	20	B	1	I	1	E	A	N	A	S	X0	157 (71)
RS20B1ICTANASX0	RS	20	B	1	I	C	T	A	N	A	S	X0	157 (71)
RS20B1SBBANASX0	RS	20	B	1	S	B	B	A	N	A	S	X0	142 (64)
RS20B1SEEANASX0	RS	20	B	1	S	E	E	A	N	A	S	X0	142 (64)
RS20B1SGTANASX0	RS	20	B	1	S	G	T	A	N	A	S	X0	142 (64)
RS20B1SNNANASX0	RS	20	B	1	S	N	N	A	N	A	S	X0	142 (64)
RS20B1S1EANASX0	RS	20	B	1	S	1	E	A	N	A	S	X0	142 (64)
RS20B1SCTANASX0	RS	20	B	1	S	C	T	A	N	A	S	X0	142 (64)

Note: Models listed in the table are for reference only. See nomenclature below for other models.

Pump Brand

RS= SANDPIPER®
AirVantage

Pump Size

20= 2"

Check Valve Type

B = Ball

Design Level

1 = Design Level

Wetted Material

A = Aluminum
I = Cast Iron
S = Stainless Steel
H = Alloy C

Diaphragm Check Valve Materials

1 = Santoprene/Santoprene
2 = PTFE-Santoprene/PTFE
B = Nitrile/Nitrile
C = FKM/PTFE
E = EPDM/EPDM
I = EPDM/Santoprene
G = PTFE-Neoprene/PTFE
N = Neoprene/Neoprene

Check Valve Seat

A = Aluminum
B = Nitrile
C = Carbon Steel
E = EPDM
N = Neoprene
S = Stainless Steel
T = PTFE
V = FKM

Non-Wetted Material Options

A = Painted Aluminum
J = Painted Aluminum w/PTFE Coated Hardware
Y = Painted Aluminum with Stainless Steel Hardware

Porting Options

N = NPT Threads
B = BSP (Tapered) Threads
R = Raised Face 150# Threaded ANSI Flange

Pump Style

A = Anodized Aluminum
Air Saving Valve

Pump Options

S = Self-Contained Electrical Generation with High Flow Metal Muffler

Kit Options

X0= EST ATEX Compliant
X1= ATEX, Intrinsically-Safe 5-30VDC, 110/120VAC, 220/240VAC Pulse Output Kit
Y0= EST US Hazardous Duty
Y1= US Hazardous Duty, Intrinsically-Safe 5-30VDC, 110/120VAC, 220/240VAC Pulse Output Kit

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

Materials	Operating Temperatures	
	Maximum	Minimum
Nitrile: 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
FKM (Fluorocarbon): 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 FKM.	350°F 177°C	-40°F -40°C
Polypropylene:	180°F 82°C	32°F 0°C

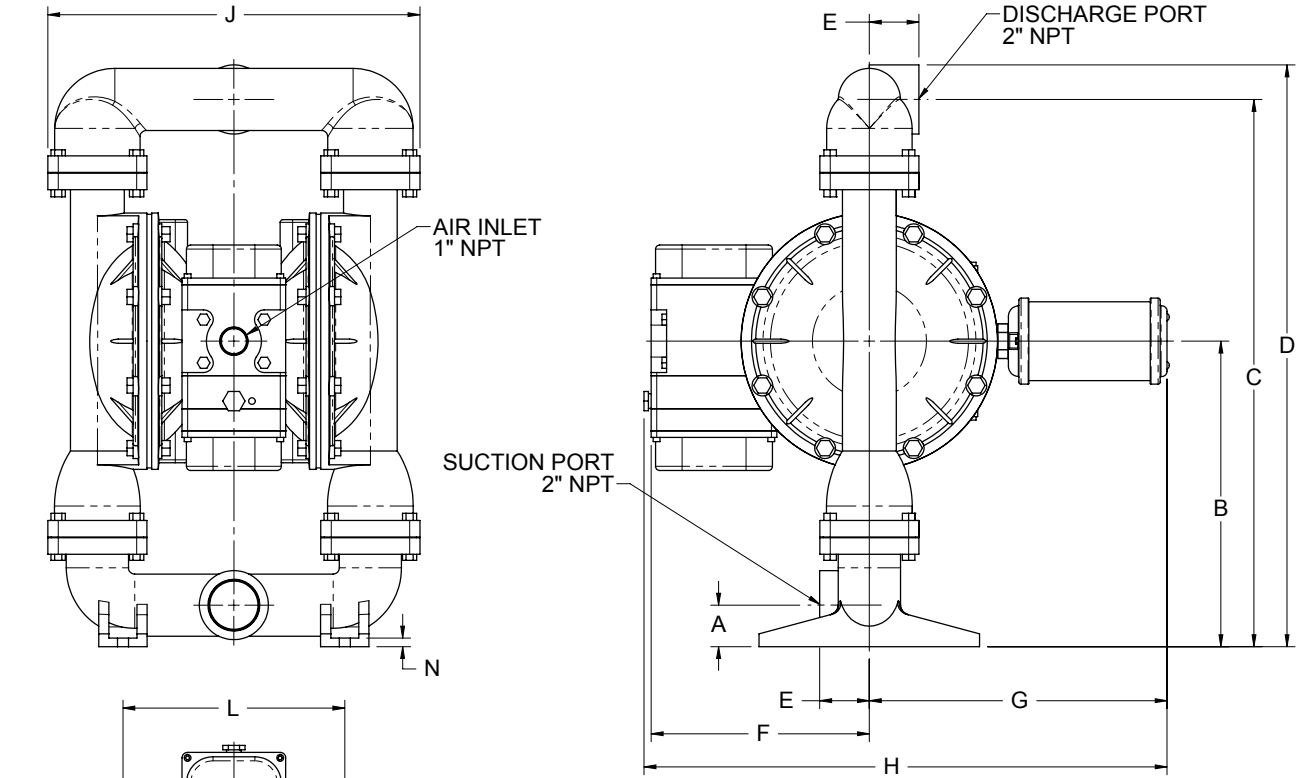
For specific applications, always consult The Warren Rupp Chemical Resistance Chart

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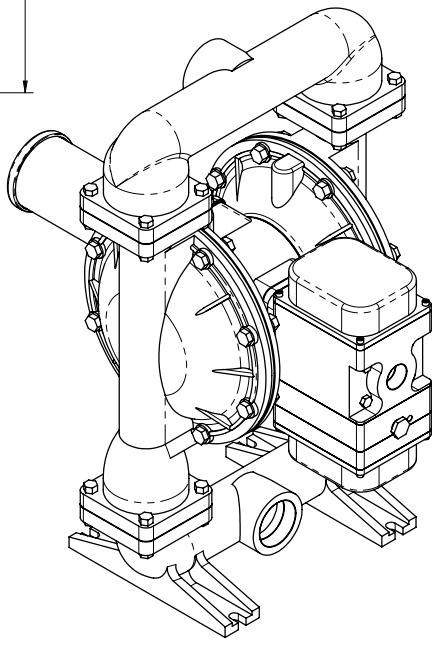
®Santoprene is a registered tradename of Exxon Mobil Corporation.

®SANDPIPER and Warren Rupp are registered tradenames of Warren Rupp, Inc.

Dimensions: Hazardous Duty RS20



BOTH SUCTION AND DISCHARGE PORTS ARE AVAILABLE WITH 2" BSP CONNECTION



	English ±.125		Metric ±3mm	
	Aluminum Cast Iron	Stainless Alloy "C"	Aluminum Cast Iron	Stainless Alloy "C"
A	1.88	2.00	48	51
B	13.81	13.94	351	354
C	24.75	24.88	629	632
D	26.25	26.38	667	681
E	2.25		57	
F	9.90		251	
G	13.50		343	
H	23.72		602	
J	16.94		430	
K	9.00		229	
L	10.06		256	
M	10.00		254	
N	.38		10	
P	.50		13	