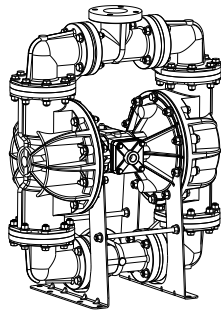


**WARREN  
RUPP®**

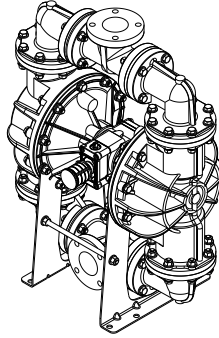
Quality System  
ISO9001 Certified

Environmental  
Management System  
ISO14001 Certified

**IDEX**  
FLUID & METERING



Air Inlet Side View



Air Exhaust Side View

**SANDPIPER®**

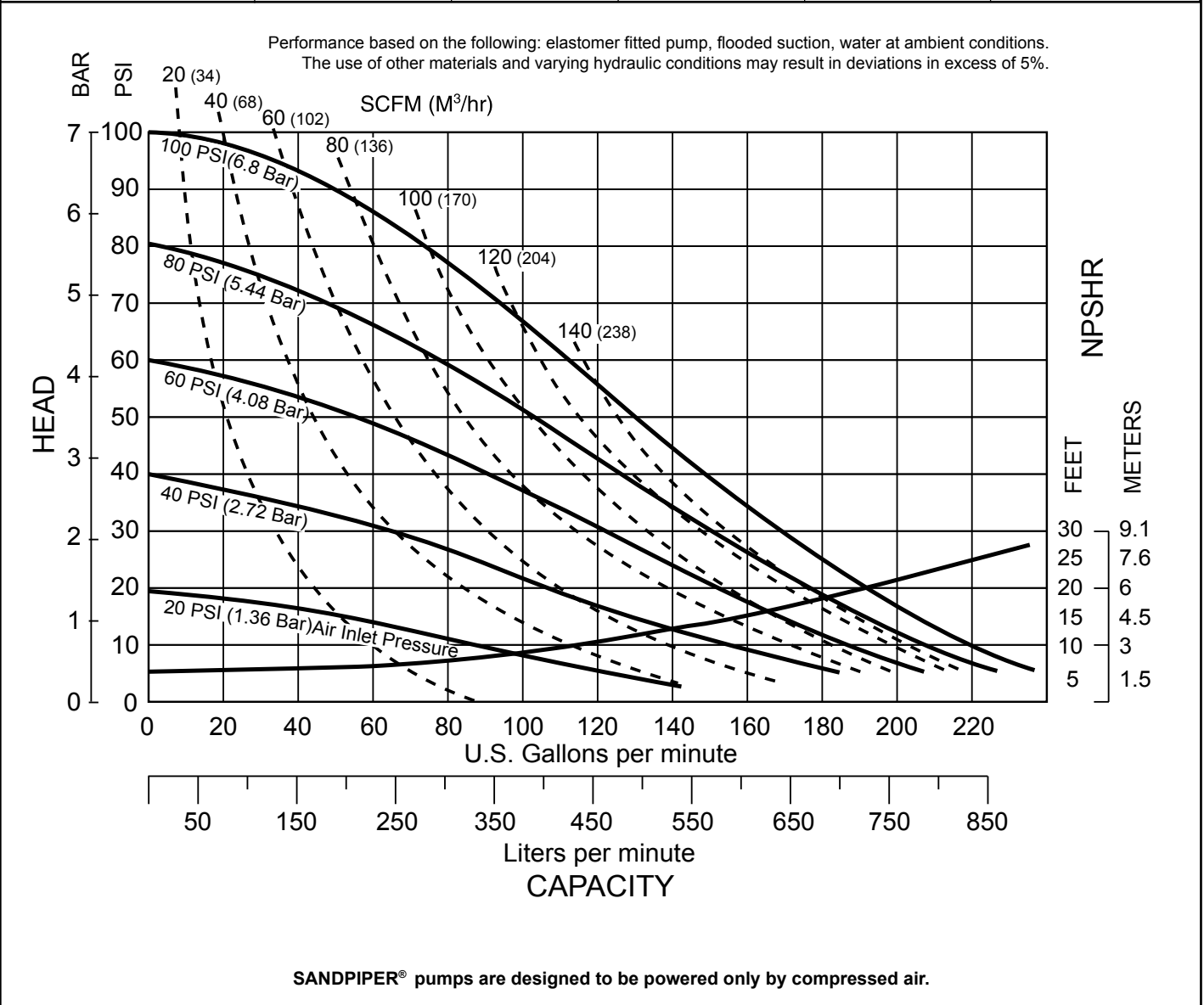
A WARREN RUPP PUMP BRAND

**S30**  
**Non-Metallic Ball Valve**  
**Design Level 2**  
**Air Operated**  
**Double Diaphragm Pump**

ENGINEERING, PERFORMANCE  
& CONSTRUCTION DATA



INTAKE/DISCHARGE PIPE SIZE	CAPACITY	AIR VALVE	SOLIDS-HANDLING	HEADS UP TO	DISPLACEMENT/STROKE
3" ANSI Flange or 80mm DIN Flange	0 to 238 gallons per minute (0 to 901 liters per minute)	No-lube, no-stall design	Up to .71 in. (18mm)	100 psi or 231 ft. of water (7 bar or 70 meters)	.9 Gallon / 3.41 liter



# Explanation of Pump Nomenclature

## S30 Non-Metallic · Design Level 2 · 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)
S30B2P1PQAS000.	S	30	B	2	P	1	P	Q	A	S	0	00.	231 (105)
S30B2P2PQAS000.	S	30	B	2	P	2	P	Q	A	S	0	00.	231 (105)
S30B2K1KQAS000.	S	30	B	2	K	1	K	Q	A	S	0	00.	315 (143)
S30B2K2KQAS000.	S	30	B	2	K	2	K	Q	A	S	0	00.	315 (143)
S30B2P4PQAV000.	S	30	B	2	P	4	P	Q	A	V	0	00.	270 (122)
S30B2K4KQAV000.	S	30	B	2	K	4	K	Q	A	V	0	00.	354 (161)

### Pump Brand

S= SANDPIPER®

### Pump Size

30=3"

### Check Valve Type

B= Ball

### Design Level

2= Design Level 2

### Wetted Material

K= PVDF

P= Polypropylene

### Diaphragm Check Valve Materials

1= Santoprene/Santoprene

2= PTFE-Santoprene Backup/PTFE

3= PTFE Pumping, PTFE-Santoprene Backup Driver/PTFE

4= Santoprene Pumping, Santoprene Driver/Santoprene

### Check Valve Seat

K= PVDF

P= Polypropylene

U= Polyurethane/ Polyurethane

### Non-Wetted Material Options

A= Painted Aluminum

J= Painted Aluminum PTFE

Q= Epoxy Coated Aluminum

K= PTFE Coated Aluminum

L= PTFE Coated Aluminum with

PTFE Coated Hardware

R= Epoxy Coated Aluminum with

PTFE Coated Hardware

### Porting Options

A= ANSI Flange

D= DIN Flange

7= Dual Porting (ANSI)

8= Top Dual Porting (ANSI)

9= Bottom Dual Porting (ANSI)

### Pump Style

D= Spill Containment with Electronic

Leak Detection (110V)

E= Spill Containment with Electronic

Leak Detection (220V)

M= Spill Containment with Mechanical

Leak Detection

S= Standard

V= Spill Containment with Visual

Leak Detection

### Pump Options

0= None

1= Sound Dampening Muffler

2= Mesh Muffler

3= Expanded Clearance Air

Valve w/Integral Muffler

4= Expanded Clearance Air

Valve Sound Dampening

Muffler

5= Expanded Clearance

Air Valve w/Mesh Muffler

### Kit Options

00.= None

P0.= 10-30VDC

Pulse Output Kit

P1.= Intrinsically-Safe

5-30VDC, 110/120VAC,

220/240VAC

Pulse Output Kit

P2.= 110/120 or 220/240VAC

Pulse Output Kit

### Kit Options, Continued

E0.= Solenoid Kit with

24VDC Coil

E1.= Solenoid Kit with 24VDC

Explosion-Proof Coil

E2.= Solenoid Kit with

24VAC/12VDC Coil

E3.= Solenoid Kit with 12VDC

Explosion-Proof Coil

E4.= Solenoid Kit with 110VAC Coil

E5.= Solenoid Kit with 110VAC, 60

Hz Explosion-Proof Coil

E6.= Solenoid Kit with 220VAC Coil

E7.= Solenoid Kit with 220VAC,

60 Hz Explosion-Proof Coil

E8.= Solenoid Kit with 110VAC, 50

Hz Explosion-Proof Coil

E9.= Solenoid Kit with 230VAC, 50

Hz Explosion-Proof Coil

SP.= Stroke Indicator Pins



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

Materials	Operating Temperatures	
	Maximum	Minimum
<b>Nitrile</b> 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
<b>PVDF</b> A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and impact resistance.	250°F 121°C	0°F -18°C
<b>NEOPRENE</b> All purpose. Resistant to vegetable oils. 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
<b>PTFE</b> 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
<b>FKM (Fluorocarbon)</b> 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
<b>Santoprene®</b> Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°C
<b>Polypropylene</b> A thermoplastic polymer. Moderate tensile and flex strength. Resists strong acids and alkalies. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents.	180°F 82°C	32°F 0°C

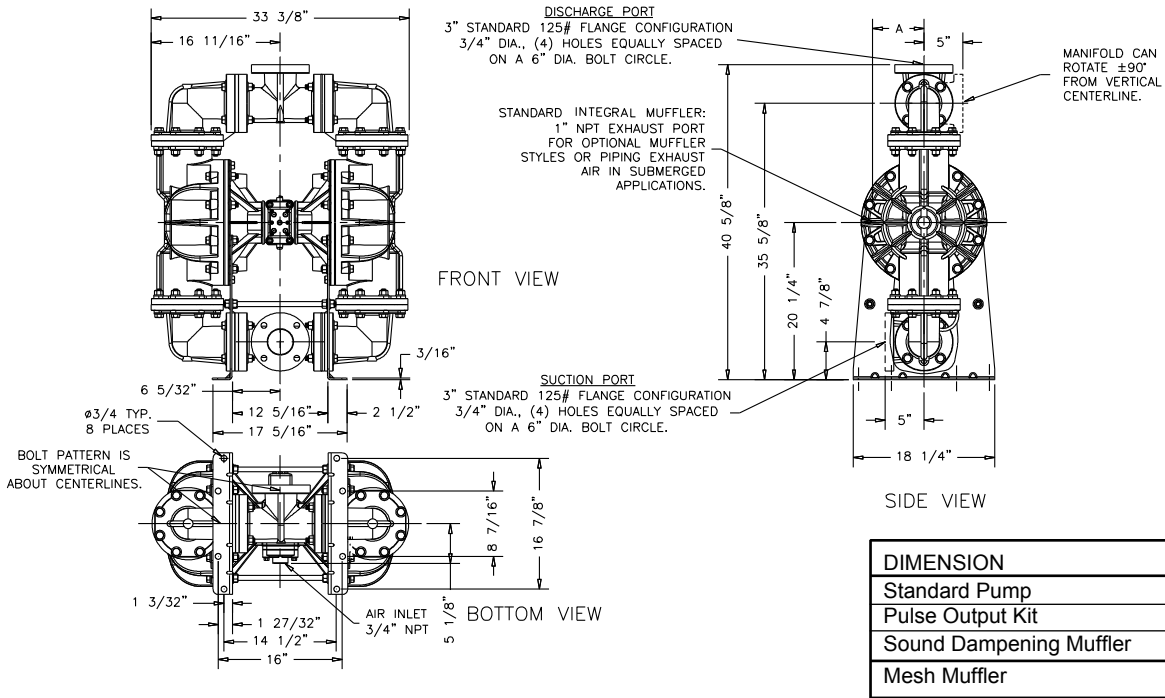
Maximum and Minimum Temperatures are the limits for which these materials can be operated. Temperatures coupled with pressure affect the longevity of diaphragm pump components. Maximum life should not be expected at the extreme limits of the temperature ranges.

For specific applications, always consult the Warren Rupp "Chemical Resistance Chart"

**CAUTION:** Nonmetallic pumps and plastic components are not UV stabilized. Ultraviolet radiation can damage these parts and negatively affect material properties. Do not expose to UV light for extended periods of time.

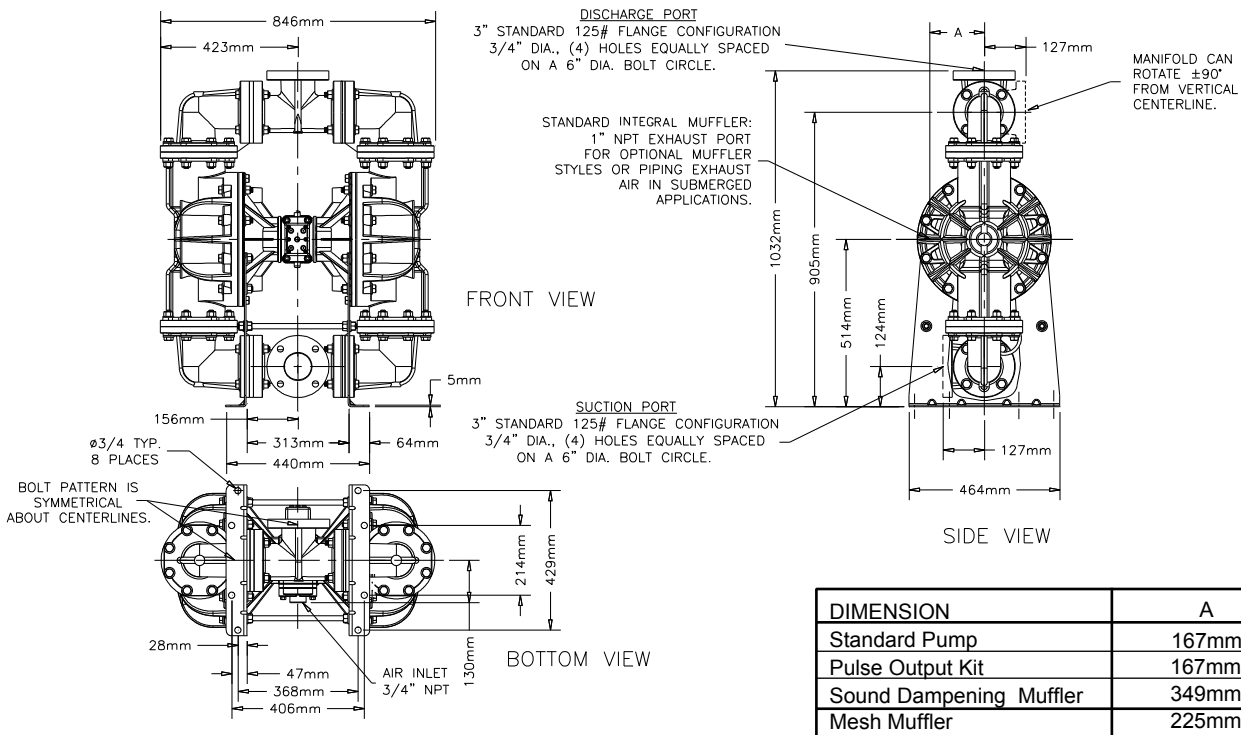
# Dimensions: S30 Non-Metallic

Dimensions in Inches  
Dimensional Tolerance:  $\pm 1/8"$



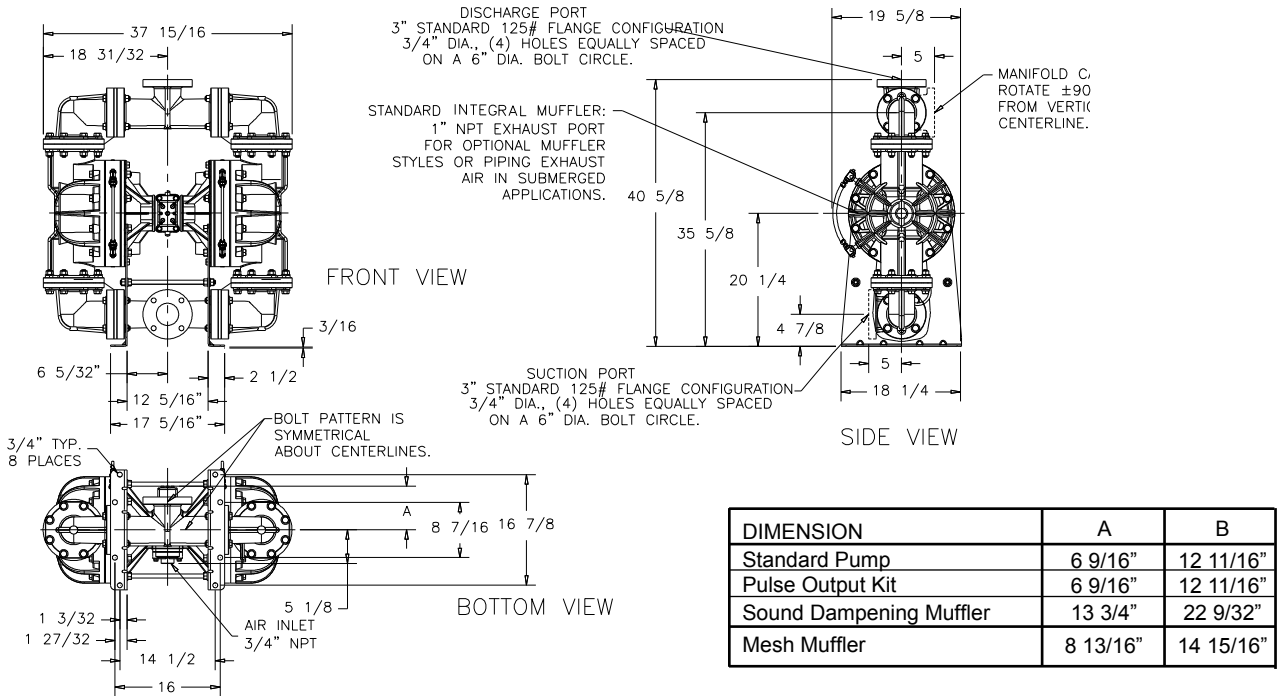
**Note:** Porting Flanges are also available with PN10 80mm DIN bolting configuration.

Dimensions in Millimeters  
Dimensional Tolerance:  $\pm 3$ mm



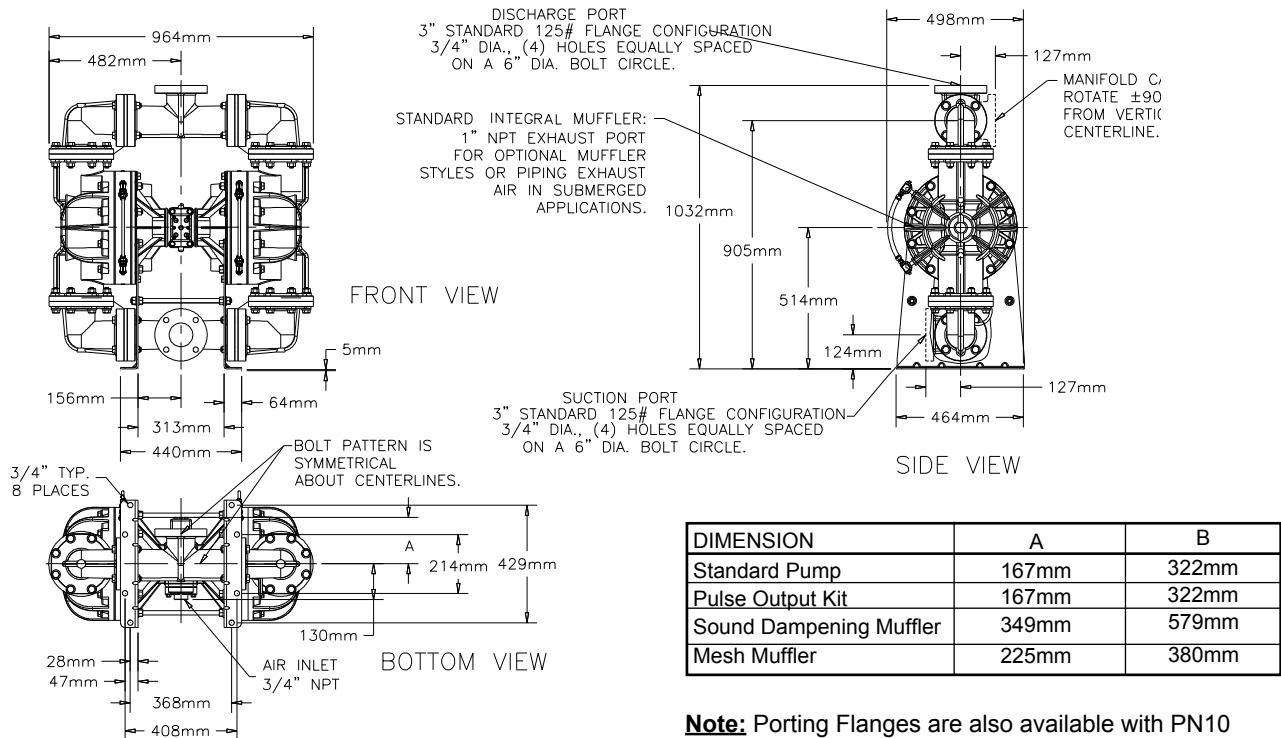
# Dimensions: S30 Non-Metallic with Containment Duty

Dimensions in Inches  
Dimensional Tolerance:  $\pm 1/8"$



**Note:** Porting Flanges are also available with PN10 80mm DIN bolting configuration.

Dimensions in Millimeters  
Dimensional Tolerance:  $\pm 3$ mm



**Note:** Porting Flanges are also available with PN10 80mm DIN bolting configuration.