F15 NON-METALLIC PUMP TECHNICAL DATA SHEET



SERIES

STANDARD DUTY BALL VALVE PUMPS

Offering the widest range of performance and application capabilities

PERFORMANCE

SUCTION / DISCHARGE PORT SIZE

1 1/2 ANSI Flange

CAPACITY

0 to 100 gallons per minute (0 to 378 LPM)

AIR DISTRIBUTION VALVE

· No-lube, no-stall design

SOLIDS-HANDLING

• Up to .47 in. (12mm)

HEADS UP TO

 100 psi or 231 ft. of water (7 Kg/cm2 or 70 meters)

MAXIMUM OPERATING PRESSURE

100 psi (7 bar)

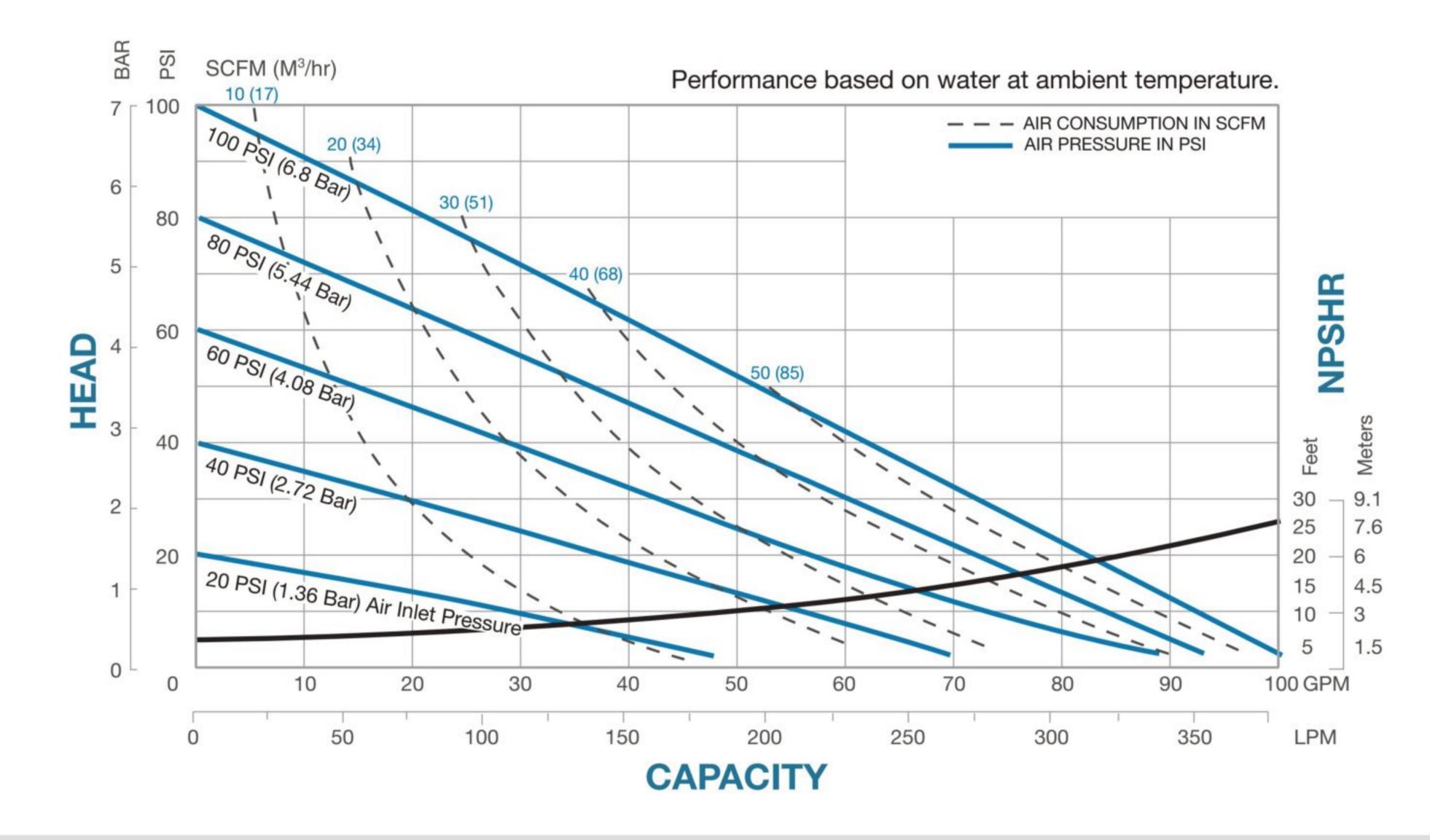
DISPLACEMENT/STROKE

.43 Gallon / 1.63 liter

WEIGHTS

- Polypropylene 82 lbs. (37kg)
- PVDF 112 lbs. (51kg)
- Conductive Polypropylene 85 lbs. (38kg)







5 YEAR LIMITED PRODUCT WARRANTY



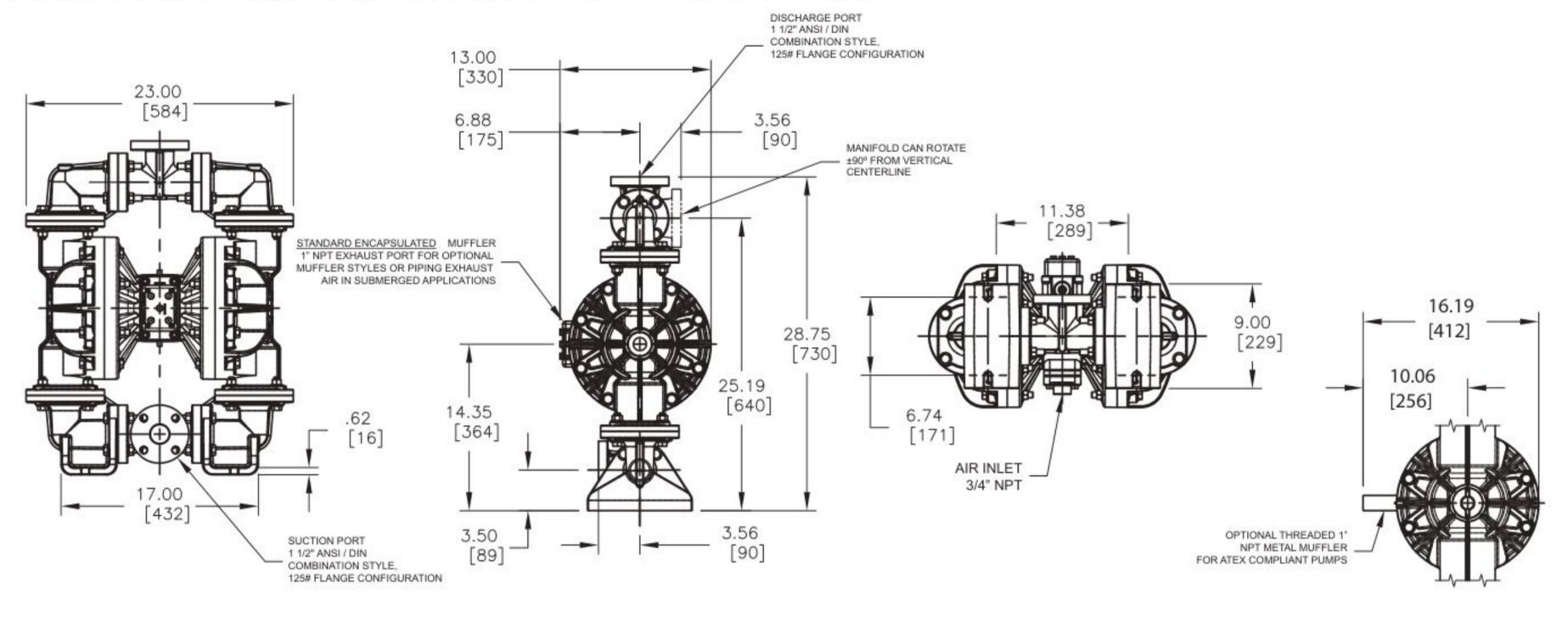
USE ONLY GENUINE FTA PARTS

All certification, standards, guarantees & warranties originally supplied with this pump will be invalidated by the use of service parts not identified as "Genuine FTA Parts.

DIMENSIONS / Details on Service Manual

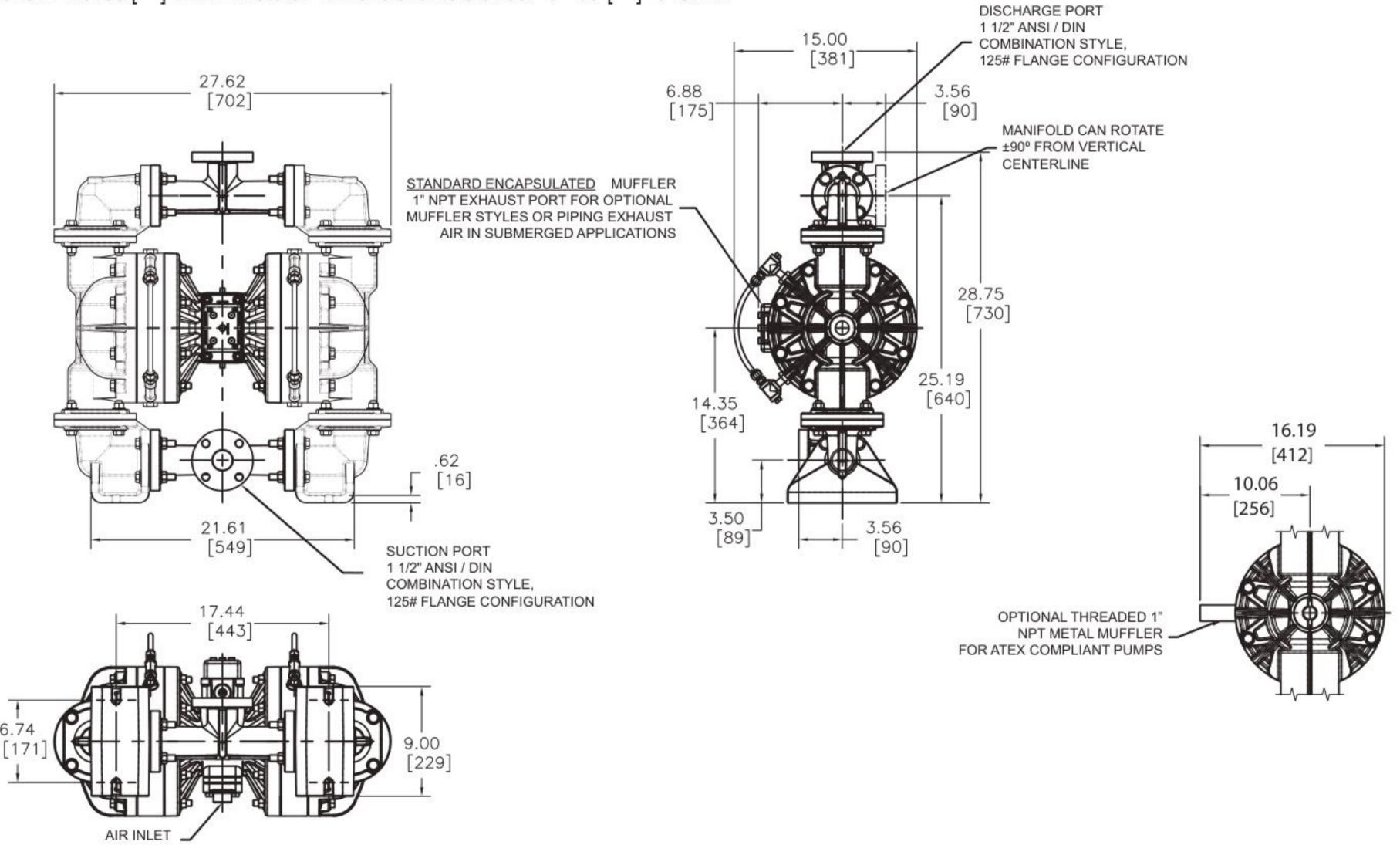
F15 Non-Metallic

Dimensions in Inches [] in Millimeters. Dimensional tolerance: +/- 1/8" [] +/- 3mm



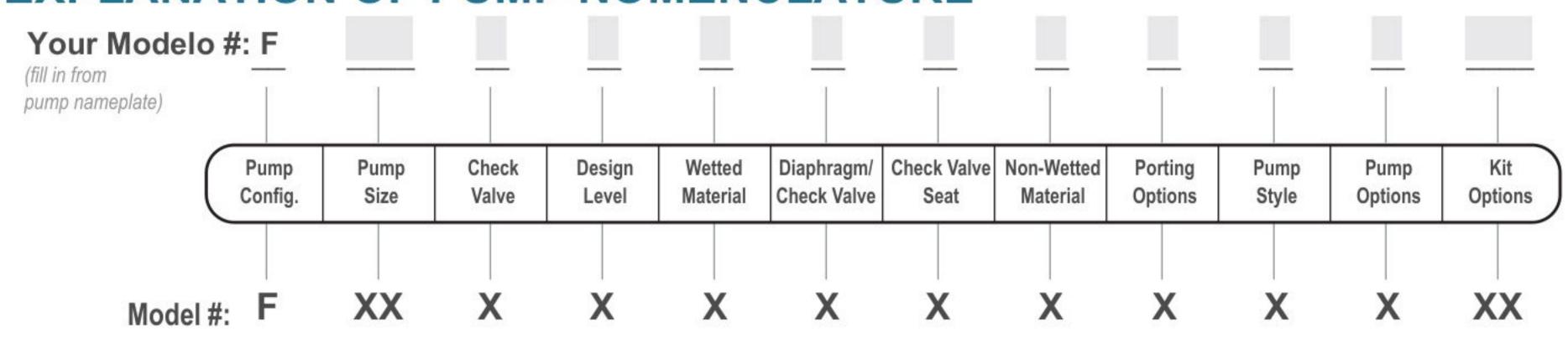
F15 Non-Metallic with Spill Containment

Dimensions in Inches [] in Millimeters. Dimensional tolerance: +/- 1/8"[] +/- 3mm





EXPLANATION OF PUMP NOMENCLATURE



PUMP BRAND

F FTA®

PUMP SIZE

15 1 1/2"

CHECK VALVE TYPE

B Ball

DESIGN LEVEL

3 Design Level

WETTED MATERIAL

K PVDF

P Polypropylene

C Conductive Polypropylene

DIAPHRAGM/CHECK VALVE MATERIALS

1 Santoprene/Santoprene

2 PTFE-Santoprene Backup/PTFE

PTFE Pumping, PTFE-Neoprene

Backup Driver/PTFE

B Nitrile/Nitrile
C FKM / PTFE

G PTFE-Neoprene Backup/PTFE

M Santoprene/PTFE

N Neoprene/Neoprene

Z One-Piece Bonded/PTFE

CHECK VALVE SEAT

K PVDF

P Polypropylene

NON-WETTED MATERIAL OPTIONS

C Carbon Filled Conductive

Polypropylene

P 40%Glass Filled Polypropylene

1 40%Glass Filled Polypropylene w/PTFE Coated Hardware

PORTING OPTIONS

U Universal Flange

(Fits ANSI & DIN)

7 Dual Porting (ANSI)8 Top Dual Porting (ANSI)

9 Bottom Dual Porting (ANSI)

PUMP STYLE

with Electronic Leak Detection (12-32 VDC)

E with Electronic Leak Detection (110-120VAC / 220-240 VAC)

M with Mechanical Leak Detection

S Standard

V with Visual Leak Detection

PUMP OPTIONS

0 None

6 Metal Muffler

KIT OPTIONS

00. None

P0. 10.30VDC Pulse Output Kit

P1. Intrinsically-Safe 5.30VDC, 110/120VAC 220/240 VAC Pulse Output Kit

P2. 110/120 or 220/240VAC Pulse Output Kit

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 Explosion-Proof Coil

E6. Solenoid Kit with 220VAC Coil

E7. Solenoid Kit with 220VAC

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 PinsA1. Solenoid Kit with 12 VDC

ATEX Compliant Coil

A2. Solenoid Kit with 24 VDC

ATEX Compliant Coil

A3. Solenoid Kit with 110/120 VAC

50/60 Hz ATEX Compliant Coil

A4. Solenoid Kit with 220/240 VAC
50/60 Hz ATEX Compliant Coil

MATERIALS

Material Profile:		Operating Temperatures:	
CAUTION! Operating temperature limitations are as follows	:	Max.	Min.
conductive acetal: Tough, impact resistant, ductile. Go abrasion resistance and low friction surface. Generally inert, with good chemical resistance except for strong acids and oxidizing agents.	ood	190°F 88°C	-20°F -29°C
EPDM: Shows very good water and chemical resistance. Has poor resistance to oils and solvents, but is fair in ketones and alcohols.		280°F 138°C	-40°F -40°C
FKM (FLUOROCARBON): Shows good resistance to a wide range of oils and solvents; especially all aliphatic, aromatic are halogenated hydrocarbons, acids, animal and vegetable oils. Hot water or hot aqueous solutions (over 70°F(21°C)) will attack.	nd	350°F 177°C	-40°F -40°C
HYTREL®: Good on acids, bases, amines and glycols at room temperatures only.		220°F 104°C	-20°F -29°C
NEOPRENE: All purpose. Resistance to vegetable oils. Generally not affected by moderate chemicals, fats, greases and many oils and solvents. Generally attacked by strong oxidizin acids, ketones, esters and nitro hydrocarbons and chlorinated aromatic hydrocarbons.	g	200°F 93°C	-10°F -23°C
NITRILE: General purpose, oil-resistant. Shows good solvent oil, water and hydraulic fluid resistance. Should not be used whighly polar solvents like acetone and MEK, ozone, chlorinate hydrocarbons and nitro hydrocarbons.	vith	190°F 88°C	-10°F -23°C
NYLON: 6/6 High strength and toughness over a wide temperature range. Moderate to good resistance to fuels, oils and chemicals.		180°F 82°C	32°F 0°C

POLYPROPYLENE: A thermoplastic polymer. Moderate tensile and flex strength. Resists stong acids and alkali. Attacked by chlorine, fuming nitric acid and other strong oxidizing agents.	180°F 82°C	32°F 0°C
PVDF: (Polyvinylidene Fluoride) 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
SANTOPRENE®: Injection molded thermoplastic elastomer with no fabric layer. Long mechanical flex life. Excellent abrasion resistance.	275°F 135°C	-40°F -40°C
UHMW PE: A thermoplastic that is highly resistant to a broad range of chemicals. Exhibits outstanding abrasion and impact resistance, along with environmental stress-cracking resistance.	180°F 82°C	-35°F -37°C
URETHANE: Shows good resistance to abrasives. Has poor resistance to most solvents and oils.	150°F 66°C	32°F 0°C
VIRGIN PTFE: (PFA/TFE) Chemically inert, virtually impervious. Very few chemicals are known to chemically react 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

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.

Metals:

ALLOY C: Equal to ASTM494 CW-12M-1 specification for nickel and nickel alloy.

STAINLESS STEEL: Equal to or exceeding ASTM specification A743 CF-8M for corrosion resistant iron chromium, iron chromium nickel and nickel based alloy castings for general applications. Commonly referred to as 316 Stainless Steel in the pump industry.

For specific applications, always consult the Chemical Resistance Chart.

