# G1F METALLIC PUMP TECHNICAL DATA SHEET

# SERIES

### NATUAL GAS PUMPS

CSA certified to ANSI LC6 standard and Canadian Technical Letter No. R-14 for operation using sweet or sour natural gas

# PERFORMANCE

### SUCTION / DISCHARGE PORT SIZE

- 1" NPT
- 1" BSP

# CAPACITY

• 0 to 45 gallons per minute (0 to170 LPM)

- **AIR DISTRIBUTION VALVE** 
  - No-lube, no-stall design

### SOLIDS-HANDLING

# • Up to .25" in. (6mm)

HEADS UP TO

 100 psi or 231 ft. of water (7 bar or 70 meters)

# MAXIMUM OPERATING PRESSURE

# 100 psi (7 bar)

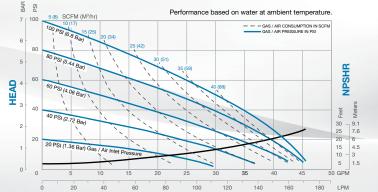
# DISPLACEMENT/STROKE

• .11 Gallon / .42 liter

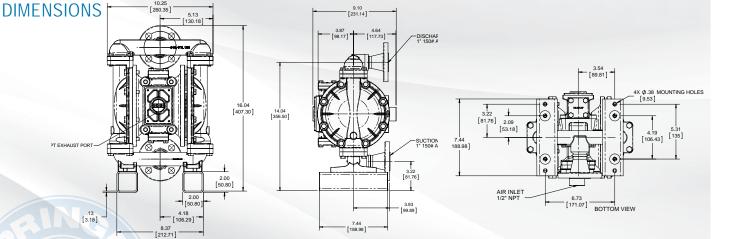
### WEIGHTS

- Aluminum 28 lbs. (13kg)
- Stainless Steel 43 lbs. (20kg)









# **5 YEAR LIMITED PRODUCT WARRANTY**

5 Year Guarantee for defects in material or workmanship. See sandpiperpump.com/content/warranty-certifications for complete warranty, including terms and conditions, limitations and exclusions.



#### **USE ONLY GENUINE SANDPIPER PARTS**

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



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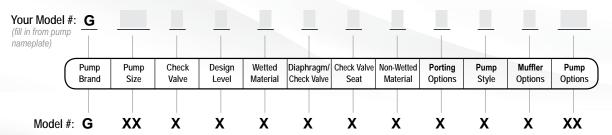
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# EXPLANATION OF PUMP NOMENCLATURE



#### PUMP BRAND

G Natural Gas Operated

#### PUMP SIZE

1F 1"

# CHECK VALVE TYPE

Ball В

## **DESIGN LEVEL**

Design Level 1

# WETTED MATERIAL

- s Stainless Steel
- А Aluminum

# **DIAPHRAGM/CHECK VALVE MATERIALS**

- Nitrile/Nitrile в
- PTFE -Nitrile/PTFE Т
- FKM/FKM v

MATERIALS

**Material Profile:** 

#### С FKM/PTFE

5 Nitrile/PTFE

# **CHECK VALVE SEAT**

- Virgin PTFE т
- Aluminum Α

D

#### Stainless Steel S

# NON-WETTED MATERIAL OPTIONS

- Painted Aluminum A
- Unpainted Aluminum with Stainless Steel Gas Valve в
  - Unpainted Aluminum with Stainless Steel Gas Valve with FKM O-rings
- Х **Unpainted Aluminum**
- Unpainted Aluminum/FKM Elastomer 0
- Painted Aluminum/ FKM Elastomer v

## **PORTING OPTIONS**

- NPT Threads Ν
- BSP (Tapered) Threads в

#### 150# Raised Face 1" ANSI R Flange w/ Threaded Pipe Connections 150# Welded Raised Face 1" w ANSI Flanged Manifolds

### **PUMP STYLE**

Standard S

### **MUFFLER OPTIONS**

No Muffler Permitted \* х

180°F

82°C

250°F

121°C

275°F

135°C

180°F

82°C

150°F

66°C

220°F

104°C

32°F

0°C

0°F

-18°C

-40°F

-40°C

-35°F -37°C

32°F

0°C

-35°F

-37°C

|   | Operating<br>Temperatures: |                | POLYPROPYLENE: A thermoplastic polymer. Moderate tensile<br>and flex strength. Resists stong acids and alkali. Attacked by<br>chlorine, fuming nitric acid and other strong oxidizing agents.      |  |
|---|----------------------------|----------------|--|--|
| are as follows:                                   | Max.                       | Min.           |  |  |
| nt, ductile. Good<br>enerally inert,<br>acids and | 190°F<br>88°C              | -20°F<br>-29°C | <b>PVDF:</b> (Polyvinylidene Fluoride) A durable fluoroplastic with excellent chemical resistance. Excellent for UV applications. High tensile strength and impact resistance.                     |  |
|   |                            |                | SANTOPRENE*: Injection molded thermoplastic elastomer with   |  |
| sistance. Has<br>ketones and                      | 280°F<br>138°C             | -40°F<br>-40°C | no fabric layer. Long mechanical flex life. Excellent abrasion resistance.   |  |
|   |                            |                | UHMW PE: A thermoplastic that is highly resistant to a broad   |  |
| ince to a wide ic. aromatic and                   | 350°F<br>177°C             | -40°F<br>-40°C | range of chemicals. Exhibits outstanding abrasion and impact<br>resistance, along with environmental stress-cracking resistance.   |  |
| egetable oils.<br>21°C)) will attack              | 111 0                      | -40 C          | <b>URETHANE:</b> Shows good resistance to abrasives. Has poor resistance to most solvents and oils.  |  |
|   |                            |                | VIRGIN PTFE: (PFA/TFE) Chemically inert, virtually impervious.   |  |
| ycols at room                                     | 220°F<br>104°C             | -20°F<br>-29°C | Very few chemicals are known to chemically react with PTFE;<br>molten alkali metals, turbulent liquid or gaseous fluorine and a few  |  |
| ble oils. Gener-                                  | 200°F<br>93°C              | -10°F<br>-23°C | fluoro-chemicals such as chlorine trifluoride or oxygen difluoride<br>which readily liberate free fluorine at elevated temperatures.   |  |
| strong oxidizing<br>and chlorinated               |                            | 200            | Maximum and Minimum Temperatures are the limits for which the<br>operated. Temperatures coupled with pressure affect the longevit<br>components. Maximum life should not be expected at the extrem |  |
| s good solvent,                                   | 190°F                      | -10°F          | temperature ranges.  |  |
| not be used with<br>one, chlorinated              | 88°C                       | -23°C          | Metals:  |  |
| sho, chionnateu                                   |                            |                | ALLOY C: Equal to ASTM494 CW-12M-1 specification for nickel  |  |
| a wide tem-                                       | 180°F                      | 32°F           | STAINLESS STEEL: Equal to or exceeding ASTM specification /  |  |
|   |                            |                |  |  |

| 29°C<br>10°F<br>23°C<br>10°F<br>23°C | molten alkali metals, turbulent liquid or gaseous fluorine and a few<br>fluoro-chemicals such as chlorine trifluoride or oxygen difluoride<br>which readily liberate free fluorine at elevated temperatures.  |  |  |  |  |  |  |  |
|--------------------------------------|---|--|--|--|--|--|--|--|
|                                      | 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.   |  |  |  |  |  |  |  |
| 32°F<br>0°C                          | STAINLESS STEEL: Equal to or exceeding ASTM specification A743 CF-8M for co<br>sion resistant iron chromium, iron chromium nickel and nickel based alloy castings f   |  |  |  |  |  |  |  |

For specific applications, always consult the Chemical Resistance Chart.

NOTE: See service manual for ATEX details.

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| CAUTION! Operating temperature limitations are  |
|---|
| CONDUCTIVE ACETAL: Tough, impact resistant,<br>abrasion resistance and low friction surface. Gener<br>with good chemical resistance except for strong ac<br>oxidizing agents. |
| EPDM: Shows very good water and chemical resist<br>poor resistance to oils and solvents, but is fair in ke<br>alcohols.   |
| FKM (FLUOROCARBON): Shows good resistance<br>range of oils and solvents; especially all aliphatic, a<br>halogenated hydrocarbons, acids, animal and vege                      |

|  | 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(21°C)) will attack FKM.   | 177°C          | -40°C          |
|--|--|----------------|----------------|
|  | HYTREL*: Good on acids, bases, amines and glycols at room temperatures only.   | 220°F<br>104°C | -20°F<br>-29°C |
|  | NEOPRENE: All purpose. Resistance to vegetable oils. Gener-<br>ally not affected by moderate chemicals, fats, greases and<br>many oils and solvents. Generally attacked by strong oxidizing<br>acids, ketones, esters and nitro hydrocarbons and chlorinated<br>aromatic hydrocarbons. | 200°F<br>93°C  | -10°F<br>-23°C |
|  | NITRILE: General purpose, oil-resistant. Shows good solvent,<br>oil, water and hydraulic fluid resistance. Should not be used with<br>highly polar solvents like acetone and MEK, ozone, chlorinated<br>hydrocarbons and nitro hydrocarbons.   | 190°F<br>88°C  | -10°F<br>-23°C |
|  | NYLON: 6/6 High strength and toughness over a wide tem-<br>perature range. Moderate to good resistance to fuels, oils and<br>chemicals.  | 180°F<br>82°C  | 32°F<br>0°C    |

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