

### **April 17, 2019**

Please find the following addendum to the below mentioned BID.

Addendum No.: 2

**Bid**#: 19-20-2

**Project Name**: Utilities Pumps

**Bid Due Date**: Wednesday, April 24, 2019

### **GENERAL INFORMATION:**

- 1. The Gorman Rupp 6" x 6" Self Priming Centrifugal Pump is an approved equal for UTPUMP-01. The product information sheets are attached.
- 2. The Gresco 6" x 6" Model XT-6 Self Priming Pump is an approved equal for UTPUMP-01. The product information sheets are attached.

### **ATTACHMENTS:**

- 1. Gorman Rupp 6"x 6" Self Priming Centrifugal Pump.pdf
- 2. Gresco 6" x 6" Model XT-6 Self Priming Pump.pdf

<< End of Addendum # 2>>

# **Basic Pump**

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# **Self Priming Centrifugal Pump**



# Model T6A3S-B

Size 6" x 6"



### **PUMP SPECIFICATIONS**

Size: 6" x 6" (152 mm x 152 mm) NPT - Female.

Casing: Gray Iron 30.

Maximum Óperating Pressure 79 psi (545 kPa).\*

Semi-Open Type, Two Vane Impeller: Ductile Iron 65-45-12. Handles 3" (76,2 mm) Diameter Spherical Solids. Impeller Shaft: Alloy Steel 4150.

Shaft Sleeve: Alloy Steel 4130.
Replaceable Wear Plate: Carbon Steel 1026.

Removable Adjustable Cover Plate: Gray Iron 30; 62 lbs. (28 kg). Flap Valve: Neoprene W/Nylon and Steel Reinforcing.

Seal Plate: Gray Iron 30.

Bearing Housing: Gray Iron 30.
Radial Bearing: Open Single Row Ball.
Thrust Bearing: Open Double Row Ball.

Bearing and Seal Cavity Lubrication: SAE 30 Non-Detergent Oil.

Flanges: Gray Iron 30.

Gaskets: Buna-N, Compressed Synthetic Fibers, PTFE, Vegetable

Fiber, Cork, and Rubber.

O-Rings: Buna-N.

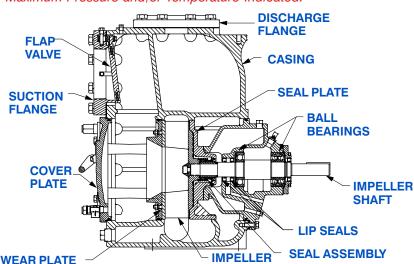
Hardware: Standard Plated Steel. **Brass Pressure Relief Valve.** 

**Bearing and Seal Cavity Oil Level Sight Gauges.** Optional Equipment: Metal Bellows Seal. Automatic Air Release Valve. 120V/240V Casing Heater. High Pump Temperature Shutdown Kit. G-R Hard Iron Casing.

Self-Cleaning Wear Plate.
Gray Iron 30 Suction and Discharge Spool Flanges:

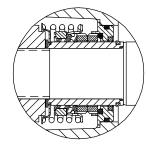
6" ASA (Specify Model T6A3S-B /F). 150 mm DIN 2527 (PN16) (Specify Model T6A3S-B /FM).

\*Consult Factory for Application's Exceeding Maximum Pressure and/or Temperature Indicated.





**Shown with Optional Suction & Discharge** Spool Flanges (Available in ASA or DIN Standard Sizes).



#### **SEAL DETAIL**

Cartridge Type, Mechanical, Oil-Lubricated, Double Floating, Self-Aligning. Tungsten Titanium Carbide Rotating and Stationary Faces. Stainless Steel 316 Stationary Fluorocarbon Seat. Elastomers (DuPont Viton<sup>®</sup> Equivalent). Stainless Steel 18-8 Cage and Spring. Maximum Temperature of Liquid Pumped, 160°F (71°C).\*



### THE GORMAN-RUPP COMPANY ● MANSFIELD. OHIO

GORMAN-RUPP OF CANADA LIMITED ● ST. THOMAS, ONTARIO, CANADA

www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.

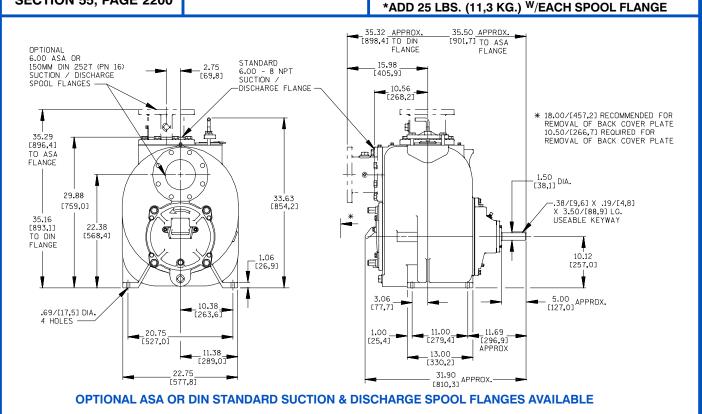
**SECTION 55, PAGE 2200** 

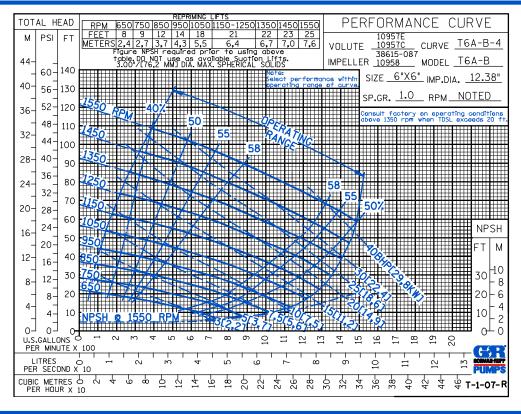
# APPROXIMATE DIMENSIONS and WEIGHTS

 NET WEIGHT:
 855 LBS. (388 KG.)\*

 SHIPPING WEIGHT:
 910 LBS. (413 KG.)\*

 EXPORT CRATE:
 32.5 CU. FT. (0,92 CU. M.)







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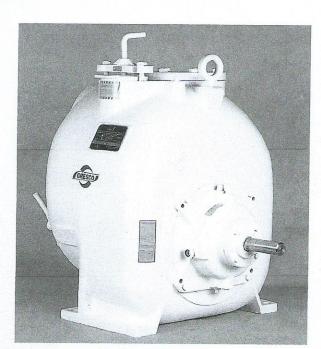
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# MODEL XT-6





WWW.BOMBAS-ESCO.COM

### DATA SHEET

NET WEIGHT 364kg (802lbs)
SHIPPING WEIGHTS 391kg (862lbs)
IMPELLER DIA.314,32mm (12.3/8")
R.P.M. FROM 650rpm TO 1550rpm
MAX. SOLIDS 76,2mm (3")

#### SELF-PRIMING

650 RPM 2,4m (8ft) - 750 RPM 2,7m (9ft)

850 RPM 3,6m (12ft) - 950 RPM 4,2m (14ft)

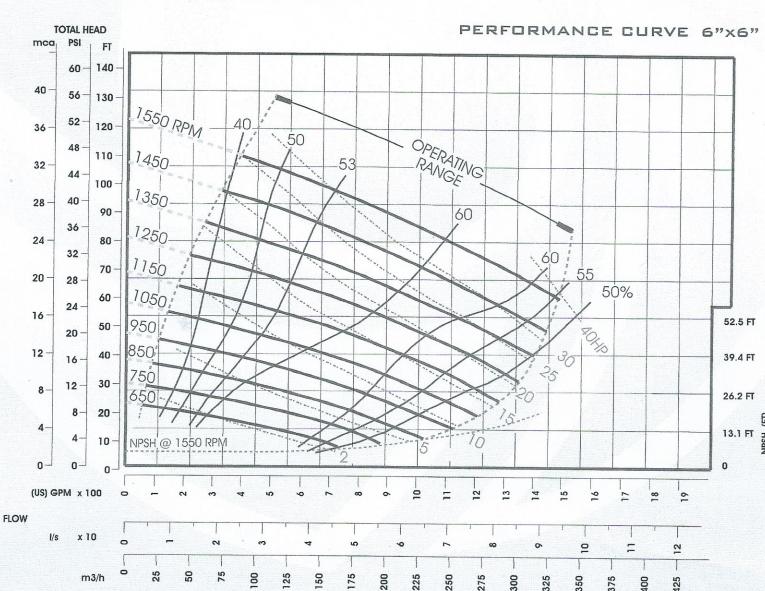
1050 RPM 5,5m (18ft) -1150 RPM 6,4m (21ft)

1250 RPM 6,4m (21ft) -1350 RPM 6,7m (22ft)

1450 RPM 7,0m (23ft) -1550 RPM 7,6m (25ft)

BEFORE USING THIS TABLE, CHECK THE NPSH.

GPESCO 10

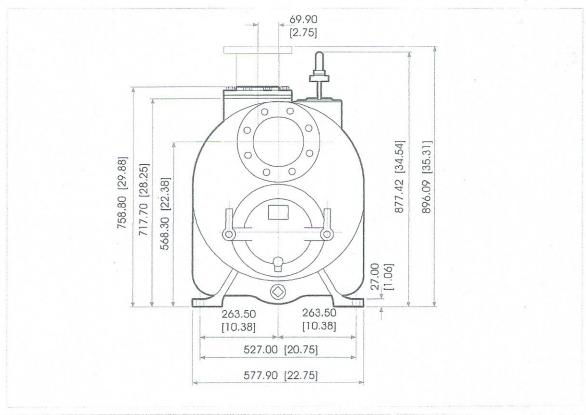


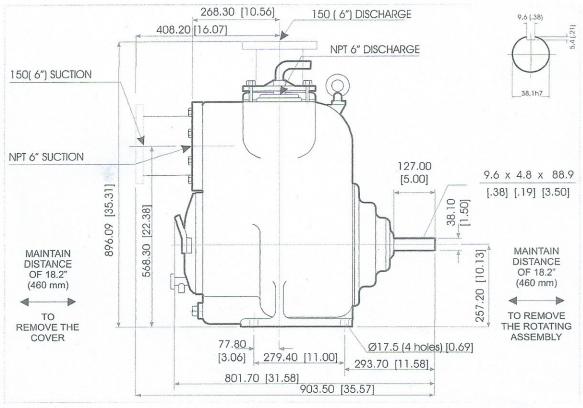




# EXTERNAL DIMENSIONS

MILLIMETERS (INCHES)







# SERIES XT SELF-PRIMING



# CONSTRUCTION MATERIALS

|                 | STANDARD                              | TYPE A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | TYPE B   | TYPE C | TYPE D | TYPE E  | TYPE F | TYPE G |
|-----------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|--------|---------|--------|--------|
|                 | I I I I I I I I I I I I I I I I I I I |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |        |        |         |        |        |
| CASING          |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A 48CL   | 30     |        | CD4 MCU | SS 316 | ADI    |
| IMPELLER        | A 60-40-18                            | A 216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CD4 MCU  | SS 316 | ADI    | CD4 MCU | SS 316 | ADI    |
| WEAR PLATE      | SAE 1020                              | A 216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CD4 MCU  | SS 316 | ADI    | CD4 MCU | SS 316 | ADI    |
| COVER PLATE     | A 48CL30                              | A 216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CD4 MCU  | SS 316 | ADI    | CD4 MCU | SS 316 | ADI    |
| BEARING HOUSING |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A 48CL30 |        |        | CD4 MCU | SS 316 | ADI    |
| SEAL PLATE      | A 48CL30                              | A 216                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CD4 MCU  | SS 316 | ADI    | CD4 MCU | SS 316 | ADI    |
| FLAP VALVE      |                                       | Neoprene Viton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |         |        |        |
| SLEEVE SHAFT    | ANSI 4140HT                           | ANSI 17-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |        |        |         |        |        |
| FLANGE          |                                       | A 48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CL30     |        | ADI    | SS 316  | SS 316 | ADI    |
| O'RINGS         | Buna                                  | Viton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |        |        |         |        |        |
| IMPELLER SHAFT  | ANSI 4140HT                           | ANSI 17-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          |        |        |         |        |        |
| MECHANICAL SEAL |                                       | Casing in SS 316, O´rings in Buna & Viton, faces in titanium and tungsten carbide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |        |        |         |        |        |
|                 |                                       | The second of th |          |        |        |         |        |        |

THE MECHANICAL SEAL FOR ALL MODELS HAS A 316SS BODY, VITON O'RINGS AND TUNGSTEN CARBIDE FACES. OTHER SEALS AVAILABLE UPON REQUEST.

ALL CAST IRON PARTS ARE ASTM 48, CLASS 30.

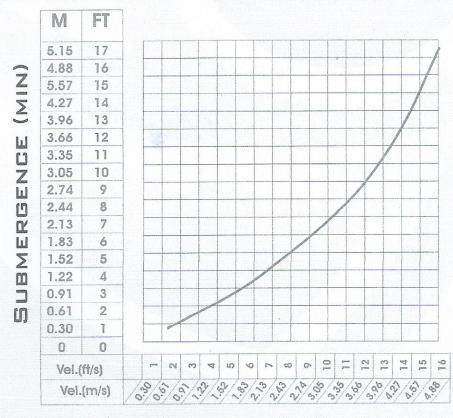
ALL CARBON STEEL SHAFTS ARE SAE 4140 HT

ALL PARTS LABELED CD4 ARE HARDENED 18-8 STAINLESS STEEL, CD4, DIN 1-4463

ALL PARTS LABELED 31655 ARE CF8M

EPDXY AND CERAMIC INTERNAL COATINGS ARE AVAILABLE. PLEASE CALL FOR QUOTE.

# SUCTION SPEED FLOW CURVE



NOTE 1: THE SUGGESTED SUCTION SHOULD HAVE THE SAME NOMINAL DIAMETER AS THE PUMP, SO THAT THE SOLIDS WILL BE TOTALLY SWEPT UP.

2: IF THE SPEED IS HIGHER THAN 3.5 M/S AND IF THERE IS A NEED FOR HIGHER "NPSH", PLEASE CONTACT THE FACTORY.





# QUICK AND SIMPLE MAINTENANCE

ROUTINE MAINTENANCE SERVICES ARE CARRIED OUT QUICKLY AND EASILY WITH THE USE OF REGULAR TOOLS, THUS ECONOMIZING TIME AND LABOR.

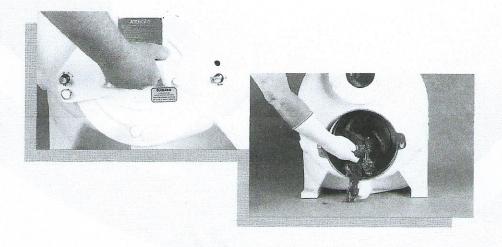


CLEANING AND INSPECTION

WITHOUT DISCONNECTING THE PIPEWORK (BACK - PULL - OUT)

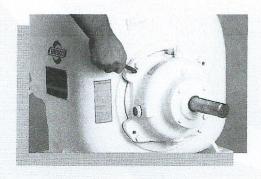
ANOTHER ADVANTAGE OF THE GRESCO PUMP IS THAT CLEANING AND CLEARING ARE SIMPLE TASKS AS ARE INSPECTION AND SUBSTITUTION OF THE IMPELLER AND SEAL, WHEN NECESSARY.

THE T AND  $oldsymbol{\mathsf{U}}$  PUMPS WERE ESPECIALLY DESIGNED FOR QUICK CLEANING BEFORE RETURNING TO OPERATION.

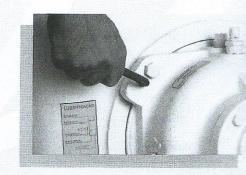


EVEN DURING PREVENTIVE
MAINTENANCE, INTERNAL INSPECTION
CAN BE CARRIED OUT QUICKLY AND
SAFELY. TO DO THIS, ALL THAT HAS
TO BE DONE IS TO UNSCREW AND LIFT
THE HANDLES OF THE INSPECTION
COVER, AND THEN PERFORM THE
CLEANING OPERATION, WITHOUT
REMOVING THE CASING NOR
DISCONNECTING THE PIPEWORK.

# SHIMLESS EXTERNAL IMPELLER ADJUSTMENT



AN EXCLUSIVE SYSTEM TO EXTERNALLY ADJUST THE IMPELLER CLEARANCE WITHOUT DISASSEMBLING THE PUMP. WITH THE USE OF JUST AN ALLEN OR FIXED WRENCH, SIMPLE ADJUSTMENT GAN OPTIMIZE PUMP EFFICIENCY WHILE EXTENDING THE LIFE OF BOTH IMPELLER AND WEAR PLATE.





### **April 11, 2019**

Please find the following addendum to the below mentioned BID.

Addendum No.: 1

**Bid#**: 19-20-2

**Project Name**: Utilities Pumps

**Bid Due Date**: Wednesday, April 24, 2019

### **GENERAL INFORMATION:**

- 1. Please delete Pricing Bid Form and replace with Pricing Bid Form-REVISED (Attached). A self-priming centrifugal pump has been added to the bid.
- 2. Please add Attachment "C" specifications for the self-priming centrifugal pump to the bid (Attached).

### **ATTACHMENTS:**

- 1. Pricing Bid Form-REVISED.pdf
- 2. Attachment "C".pdf

<< End of Addendum # 1>>

# Utilities Pumps Bid # 19-20-2

# **Pricing Bid Form-REVISED**

| Bidder <u>must</u> acknowledge all addenda by entering | ng the number the Parish assigned to EACH of |
|--------------------------------------------------------|----------------------------------------------|
| the addenda that the Bidder is acknowledging.          |                                              |

| The Bidder acknowledges | receipt of the following | g: ADDENDA: |  |
|-------------------------|--------------------------|-------------|--|
| 2                       | 1                        |             |  |

All fields must be filled in. NO blanks will be permitted. If the item is unavailable please enter  $\underline{N/A}$ .

"Price/Each" shall represent the cost for the specified item as well as any delivery charges (if applicable) to the location(s) indicated in this bid.

| REF No.   | MAKE & MODEL OR PRIOR APPROVED<br>EQUAL                                                                                      | COST PER<br>UNIT |
|-----------|------------------------------------------------------------------------------------------------------------------------------|------------------|
| UTPUMP-01 | All Prime – Model #XS-6<br>Self-Priming Pump, 6" Suction and Discharge<br>Full Diameter Impeller 12 3/8"<br>(Attachment "A") |                  |
| UTPUMP-02 | National Pump Company – Model #SE6XHC<br>8 Stage Submersible Bowl Assembly<br>(Attachment "B")                               |                  |
| UTPUMP-03 | The Gorman Rupp Company – Model #T4A3S-B/F<br>Self Priming Centrifugal Pump Size 4"x4"<br>(Attachment "C")                   |                  |

| Company:             |  |
|----------------------|--|
| Signature:           |  |
| <b>Printed Name:</b> |  |
| Title:               |  |
| Address:             |  |
| Telephone:           |  |
| Email:               |  |
| Date:                |  |

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D S

# **Self Priming Centrifugal Pump**



**Basic Pump** 

# Model T4A3S-B

Size 4" x 4"



### **PUMP SPECIFICATIONS**

Size: 4" x 4" (101 mm x 101 mm) NPT - Female.

Pump Casing: Gray Iron No. 30. Maximum Operating Pressure 86 psi (593 kPa).

Open Type, Two Vane Impeller: Ductile Iron No. 65-45-12. Handles 3" (76,2 mm) Diameter Spherical Solids.

Impeller Shaft: Álloy Steel No. 4140. Replaceable Wear Plate: Carbon Steel No. 1015. Removable Adjustable Cover Plate: Gray Iron No. 30;

37 lbs. (17 kg).

Flap Valve: Neoprene W/Steel Reinforcing.

Bearing Housing: Gray Iron No. 30. Seal Plate: Gray Iron No. 30. Shaft Sleeve: Alloy Steel No. 4130.

Radial Bearing: Open Single Ball. Thrust Bearing: Open Double Ball.

Bearing and Seal Cavity Lubrication: SAE No. 30 Non-Detergent Oil.

Flanges: 125# Gray Iron No. 30.

Gaskets: Buna-N, Compressed Synthetic Fibers, Vegetable

Fiber, PTFE, Cork, and Rubber.

O-Rings: Buna-N.

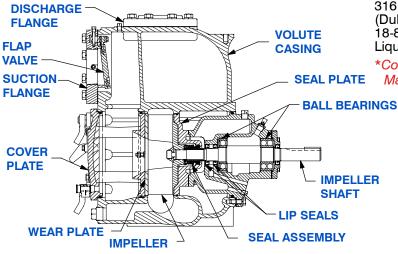
Hardware: Standard Plated Steel. **Brass Pressure Relief Valve.** 

Bearing and Seal Cavity Oil Level Sight Gauges.

Optional Equipment: Automatic Air Release Valve. Metal Bellows Seal. 120V/240V Casing Heater. High Pump Temperature Shutdown Kit. Gray Iron No. 30 Suction and Discharge Spool Flanges;

4" ASA (Specify Model T4A3S-B/F).

100 mm DIN 2527 (Specify Model T4A3S-B /FM).





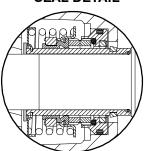
**Shown with Optional Suction & Discharge Spool** Flanges (Available in ASA or DIN Standard Sizes).

### **SEAL SPECIFICATIONS**

Cartridge Type, Mechanical, Oil-Lubricated, Double Floating, Self-Aligning. Tungsten Titanium Carbide Rotating and Stationary Faces. Stainless Steel No. 316 Stationary Seat. Fluorocarbon Elastomers (DuPont Viton® or Equivalent). Stainless Steel No. 18-8 Cage and Spring. Maximum Temperature of Liquid Pumped, 160°F (71°C).\*

\*Consult Factory for Applications Exceeding Maximum Pressure and/or Temperature Indicated.

#### **SEAL DETAIL**





## THE GORMAN-RUPP COMPANY ullet MANSFIELD, OHIO

GORMAN-RUPP OF CANADA LIMITED ● ST. THOMAS, ONTARIO, CANADA

www.gormanrupp.com

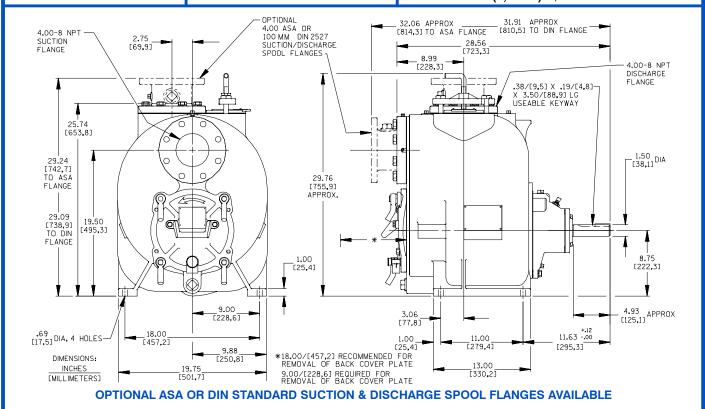
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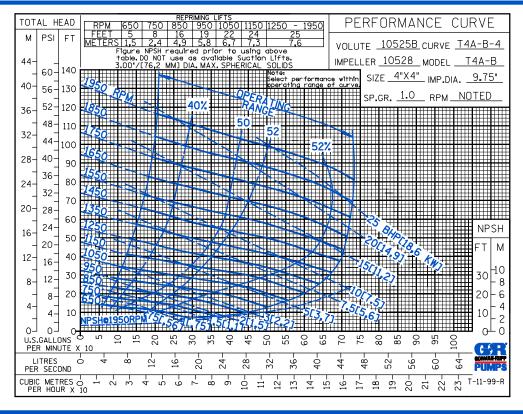
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### **SECTION 55, PAGE 2100**

# APPROXIMATE DIMENSIONS and WEIGHTS

NET WEIGHT: 575 LBS. (261 KG.)\*
SHIPPING WEIGHT: 614 LBS. (279 KG.)\*
EXPORT CRATE: 22.7 CU. FT. (0,6 CU. M.)
\*ADD 15 LBS. (6,8 KG.) W/EACH SPOOL FLANGE







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