

DETAILED SPECIFICATION

SPECIAL NOTE:

When preparing the specifications for your new fire apparatus, assure the use of a GODIVA pump by incorporating these pump specification as written. No competitive pump can match GODIVA construction or performance!

PUMP CONSTRUCTION

1. The pump shall be of a size and design to mount on the chassis of a commercial or custom truck, and have the capacity of LPM at BARS.
2. The entire pump shall be manufactured and dynamometer tested at the pump manufacturers' factory.
3. The pump shall be driven by the truck chassis engine through a PTO. The engine shall provide sufficient horse-power and RPM to enable pump to meet and exceed the specified performance.
4. The entire pump, both suction and discharge passages, shall be hydrostatically tested. The pump shall be fully tested at the pump manufacturers' factory and be free from objectionable pulsation and vibration.
5. the pump body and related parts shall be of bronze (gunmetal) BS1400 LG2C and shall be impervious to sea water. Pumps not utilising castings made of other materials are not acceptable.
6. Pump body shall be vertically split, on a single plane, for easy removal of impeller assembly including wear rings from the pump without disturbing the mounting of the pump in chassis.
7. The pump shall have a single impeller, multi impeller designs are not acceptable.
8. The pump impeller shall be made of bronze and be a mixed flow design, accurately machined and individually balanced. The impeller shall be of sufficient size and design to provide ample reserve capacity utilising minimum horse-power.
9. Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump body.
10. The impeller shall be splined keyed to the pump shaft and locked in place by a castellated nut and stainless steel pin.
11. Pump shaft to be rigidly supported by rolling element bearings for minimum deflection and end float. The shaft shall be made from BS970 431S29 stainless steel, no exceptions. Pumps requiring out board pump shaft stabiliser bearing are not acceptable.
12. Water seal to be self-adjusting mechanical seal type, incorporating a spring-loaded, carbon ring running on a stainless steel seat. The seal shall be pre-loaded during pump assembly and shall require no maintenance or adjustments during its life. Packing glands or grease seal are not acceptable.

GODIVA LIMITED

Detailed Specifications

GVB series

Midship or rear mounted CFR fire pumps

4000 to 10000 LPM

Pressures up to 20 BAR

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DRIVE UNIT CONSTRUCTION

1. The bearing housing as well as the pump, shall be constructed at the pump manufacturers' factory.

2. Pump bearing housing shall be of sufficient size to withstand the torque of the engine during fire fighting operations.

3. The bearings and shaft shall be lubricated by 1.1 litres of EP80 or equal gear oil. To ensure that the pump can be operated at any angle the vehicle may function a non-mechanical oil circulating system shall be provided.

4. The pump shaft shall be sealed with oil seals to keep road dirt and water out of the bearing housing.

MATERIALS OF CONSTRUCTION

PUMP TYPE - GVB10000

<u>COMPONENT</u>	<u>MATERIAL SPECIFICATION</u>
VOLUTE CASING	BS 1400 LG2C (GUNMETAL)
PUMP HEAD	BS 1400 LG2C (GUNMETAL)
SUCTION TUBE	BS 1400 LG2C (GUNMETAL)
IMPELLER	BS 1400 LG2C (GUNMETAL)
CASING WEARING RING	BS 1400 LG2C (GUNMETAL) ZINC PLATED AND PASSIVATED
BEARING HOUSING	BS 1452 GRADE 220 (CAST IR.)
SHAFT	BS 970 4315239 (ST ST)
SHAFT SEAL	CARBON/ST.STEEL (MECHANICAL)
CARBON SEAL HSG	BS 1400 LG2C (GUNMETAL) ZINC PLATED AND PASSIVATED