

## General Description

The CENTRAN G2 pump was designed to meet the continuous demand of the marketplace.

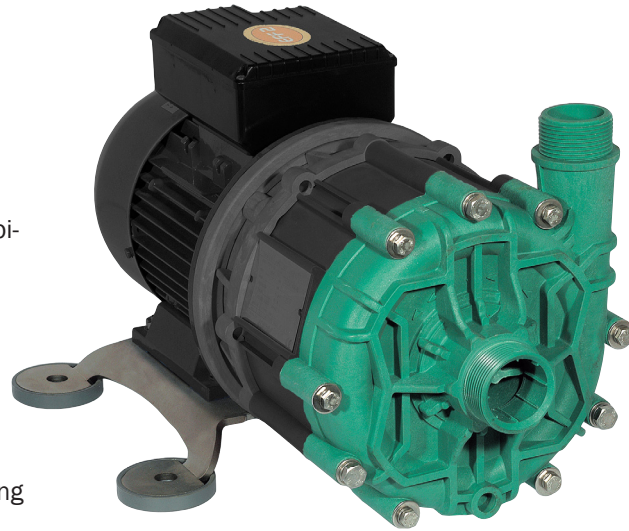
Excess friction is eliminated by controlling the impeller movement through the use of an additional magnetic field. This patented solution is called the bi-directional self alignment system.

## Features

The CENTRAN G2 is defined as “sealless” because the rear casing divides the two magnetic units, creating a sealless hermetic case all around the impeller.

The drive magnet system excludes any type of rotating seal. The only needed seal is provided by an O-ring gasket between the volute casing and the rear casing.

The CENTRAN G2 is defined as a sealless pump because the only seal between the volute casing and the back casing is a static o-ring type gasket, eliminating any rotating component of the seal.



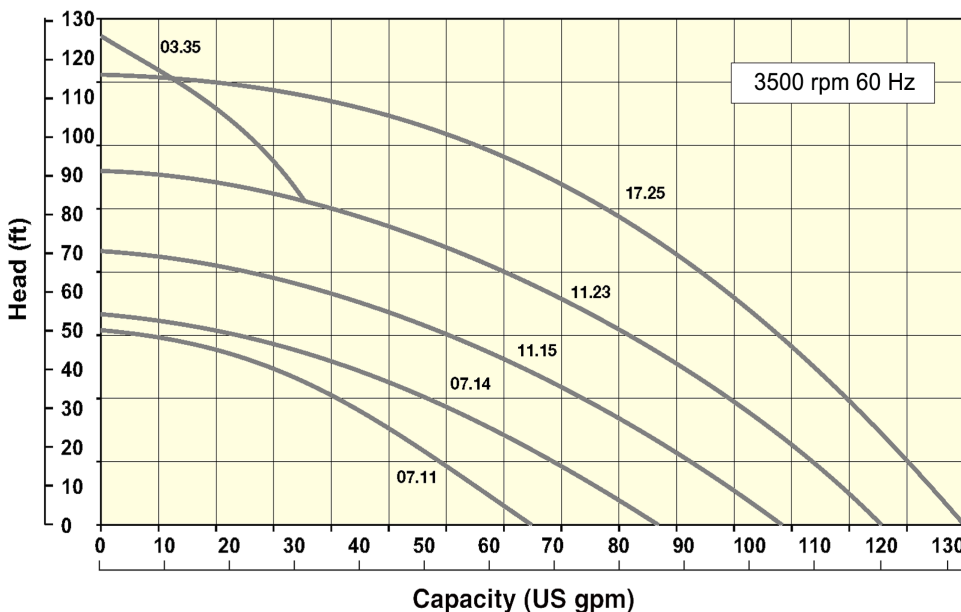
### The Patent System

The principle of bi-directional self-alignment is used in order to define a neutral position without friction. With the use of an extra magnetic field and two work areas (one anterior and one posterior), the impeller can liberally choose to work referring to hydrodynamic loads which are determined by duty point (flow/head) on the performance curve. During standard operation, two rings, which are the limiting device of axial excursion, fix the work-space engaged by the impeller. In the case of anomalies due to pressure loss while dry running, the always active extra magnetic field counteracts the axial pushes, returning the impeller to the neutral position.

Another benefit of the CENTRAN G2 is that it allows the pumping of any chemical, at low or medium temperature, with pumps made of GFR-PP (glass fibre reinforced polypropylene) or CFF-E-CTFE (Etylene-Chloro TrifluoroEtylene carbon fiber filled). Due to the internal materials of the pump, you can pump both clean fluids and mediums with solids in suspension, or those that are moderately abrasive. Liquids with a specific gravity of 1.05, 1.35, and 1.8 can be pumped at maximum flow with the correct corresponding pump: N-standard, P-powered or S-strong-powered, respectively.

The volute casing can be rotated 90° to obtain various discharge positions. The pump’s impeller is balanced in order to reduce the need for maintenance.

The CENTRAN G2 allows connections with NPT and ANSI flanges. The pump’s motor can be installed and removed easily without dismantling or opening the volute casing (standard motors are NEMA). A stainless steel guard plate is optional on all models in order to protect the front casing from mechanical impact and piping stress. The pump base is stainless steel with ground terminals of chemical-resistant thermoplastic materials and can be supplied upon request.



## Materials

| Version                   | WR                | GF                  | GX*                 |
|---------------------------|-------------------|---------------------|---------------------|
| Reinforced Polymers       | GFR/PP            | CFF/E-CTFE          | CFF/E-CTFE          |
| Minimum Temperature       | 23°F (-5°C)       | -22°F (-30°C)       | -22°F (-30°C)       |
| Maximum Temperature       | 176°F (80°C)      | 230°F (110°C)       | 230°F (110°C)       |
| Environmental Temperature | 32/104°F (0/40°C) | -4/104°F (-20/40°C) | -4/104°F (-20/40°C) |

Note: Maximum inlet pressure: 84' of head  
\*Compliant to ATEX 94/9/EC regulations

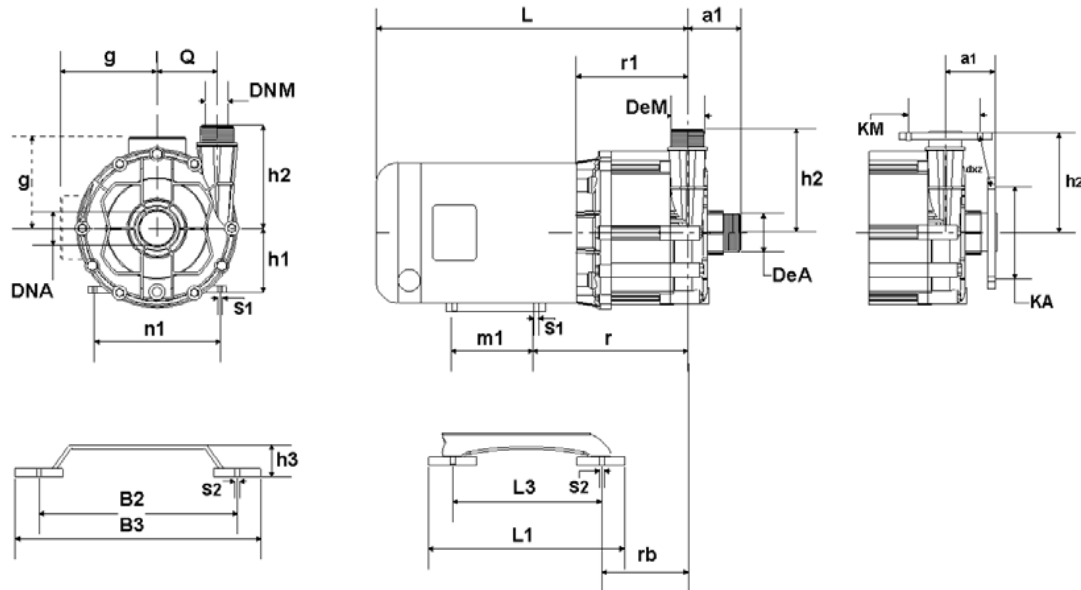
## Construction

| TMR Version          | WR      | GF           | GX           |
|----------------------|---------|--------------|--------------|
| Volute Casing        | GFR/PP  | CFF/E-CTFE   | CFF/E-CTFE   |
| Rear Casing          |         |              |              |
| Centrifugal Impeller |         |              |              |
| O-Ring Gasket        | FKM (1) | FKM (1); (2) | FKM (1); (2) |

| Guide Systems | R1        | X1  | N1       | R2        | X2  | N2       | R2        |
|---------------|-----------|-----|----------|-----------|-----|----------|-----------|
| Guide Bushing | Carbon HD | SiC | GRF/PTFE | Carbon HD | SiC | GRF/PTFE | Carbon HD |
| Thrust Bush   | CER       |     | SiC      |           | SiC |          |           |
| Shaft         | CER       |     | SiC      |           | SiC |          |           |

Note: Available upon request (1) EPDM, (2) FFKM

## Constructive Dimensions



## Dimensions with NEMA Motors - 60 Hz

| Model           | 07.11      |          | 07.14    |          |        | 11.15    |        |        | 11.23   |        | 17.25   | 03.35   |
|-----------------|------------|----------|----------|----------|--------|----------|--------|--------|---------|--------|---------|---------|
| Motor Size      | 56         | 145      | 143      | 145      | 182    | 145      | 182    | 184    | 182     | 184    | 184     | 184     |
| a1              | 2-21/32    |          | 2-21/32  |          |        | 2-21/32  |        |        | 2-21/32 |        | 2-21/32 | 2-21/32 |
| L               | 14-15/16   | 16-15/16 | 15-15/16 | 16-15/16 | 18-1/2 | 16-15/16 | 18-1/2 | 19-1/2 | 18-1/2  | 19-1/2 | 19-1/2  | 19-1/2  |
| L3              | 7-9/32     |          | 7-9/32   |          |        | 8-1/16   |        |        | 8-1/16  |        | 8-1/16  | 8-1/16  |
| h1              | 3-1/2      |          | 3-1/2    |          |        | 4-1/2    |        |        | 4-1/2   |        | 4-1/2   | 4-1/2   |
| h2              | 5-1/8      |          | 5-1/8    |          |        | 5-1/8    |        |        | 5-1/8   |        | 5-1/8   | 5-1/8   |
| B2              | 9-3/4      |          | 9-3/4    |          |        | 12       |        |        | 12      |        | 12      | 12      |
| B3              | 12-1/8     |          | 12-1/8   |          |        | 14-1/8   |        |        | 14-1/8  |        | 14-1/8  | 14-1/8  |
| h3              | 1-9/16     |          | 1-9/16   |          |        | 1-9/16   |        |        | 1-9/16  |        | 1-9/16  | 1-9/16  |
| DeM             | 1-1/4 MNPT |          |          |          |        |          |        |        |         |        |         |         |
| DeA             | 1-1/2 MNPT |          |          |          |        |          |        |        |         |        |         |         |
| ANSI Flanged KM | 3-1/2      |          | 3-1/2    |          |        | 3-1/2    |        |        | 3-1/2   |        | 3-1/2   | 3-1/2   |
| ANSI Flanged KA | 3-7/8      |          | 3-7/8    |          |        | 3-7/8    |        |        | 3-7/8   |        | 3-7/8   | 3-7/8   |

Dimensions in inches