

# **Engineering and Technical Data**

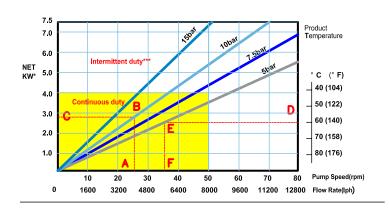


# **Powerflex 50 High Performance Hose Pumps**

#### **Features and Benefits**

- Can run dry continuously
- Most suitable for handling shear sensitive products
- Accurate (+1%) dosing (metering) capabilities
- Smooth liquid passage without valves, dead corners, or glands
- The material to be pumped does not contact mechanical parts of seals
- Easy maintenance, low cost, short down time
- Only one wearing part: the hose
- Easily and completely cleanable
- Easily adjustable and reversible rotation
- Suitable for high viscosity and densities
- No metal contact or valves
- Safe for use in explosive environments
- No internal back flow (slip)
- Designed to pump liquids containing particles (abrasion is no restriction)
- Self priming to 95% vacuum
- Direct coupled design to do easy service and save space
- Ultra compact footprint with flanged planetary gearing: no coupling or drive alignment required
- Three year comprehensive warranty

#### **PF 50 Performance Chart**



How to calculate speed/horsepower

A Flow required, indicates pump speed

B Calculated discharge pressure

C Horsepower required

D Fluid temperature

E Calculated discharge pressure

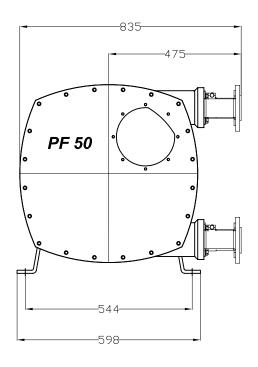
F Maximum recommended pump speed\*\*

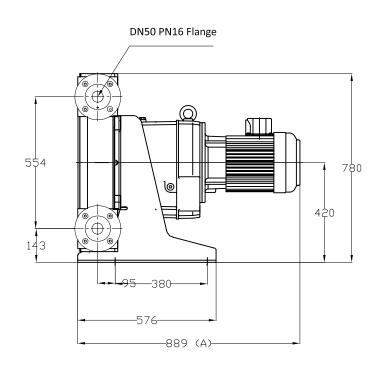
\* Minimum starting torque 620N.M based on starting unloaded at atmospheric discharge pressure. Starting torque can be 2-3X running torque if starting under the load of higher discharge pressures.

\*\* For maximum hose life, speed point (A) should be lower than temperature adjusted speed point (F). See example points (A) thru (F). \*\*\*Intermittent duty = 2 hrs max continuous running, 1 hr stop before restart.

## **Endura-Vary Pump**

# Ndura Vary Engineering and Technical Data





**PF 50 High Performance Hose Pumps** 

### **Technical Specification**

- Displacement: 2.67l/rev

- Supply: 220V/380V 3-phase

- Operating Speeds: Up to 50 rpm continuous

- Up to 80 rpm intermittent

- Fluid Temperature Range\*: -10° to 80° C

- Ambient Temperature Range\*\*: -20° to 45° C

- Hose Lubricant Required: 10L

- Flow Range: Up to 12800L/H

- Discharge Pressure: Up to 16Bar

- Suction Pressure: 9M lift to 3bar

- Hose Materials: Natural Rubber, Buna N, EPDM,

Hypalon, Bioprene\*\*\*

- Fittings: DN50 PN 16 Flange

- Insert Materials: 316SS, Polypropylene, PVC, PVDF

- Optional High Level Hose Leak Sensor: NO or NC: 1A max, 250V max, 50VA max

When installing, allow min 1.5M linear clearance from ports to facilitate hose changing

#### **Material of Construction**

| Despecification   | Material                         | Weight(kg) | Paint   |
|-------------------|----------------------------------|------------|---------|
| Pump housing      | Cast iron GG25                   | 160Kg      | RAL3011 |
| Front Cover       | Mild Steel                       | 20KG       | Black   |
| Rotor             | Cast Iron                        | 28KG       | -       |
| Rotor Shoes       | Aluminium                        | 7KG        | -       |
| Flanges           | Galvanized steel,                |            |         |
|                   | 304SS or 316SS                   |            |         |
| Flange Brackets   | Galvanized steel,                |            |         |
| Insert            | 316SS                            |            |         |
| Support Frame     | Galvanized steel, 304SS or 316SS | 38KG       |         |
| Hardware          | Zinc plated steel or 316SS       |            |         |
| Hose Clamps       | Galvanized steel 304SS           |            |         |
| Hose              | NR,NBR,EPDM                      | 6.5KG      |         |
| Lubricant         | Speical Compound glycerine       | d 15L      |         |
| Pump unit without | drive " Flat Pack"               | 285KG      |         |

Pump unit without drive "Flat Pack" 285KG

The information contained in this document is believed to be correct, but Endura-varp Pumps accepts no liability for any errors it contains, and reserves the right to alter specifications without notice