# Flexible Rising Main









# **Product Description**



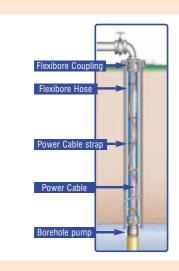
### **Description**

Flexibore is a flexible riser used for ground water pumping. By integrating thermoplastic polyurethane into a woven textile fabric of high tenacity polyester, the hose is produced. This process gives the hose flexibility while sustaining the weight of a submersible pump.

#### Compatibility

Flexibore will suit many borehole applications and is compatible with most submersible pumps. The sizes range from 40mm to 200mm internal diameter and depths of up to 250m.

# **Applications**



#### **Typical Applications**

These include mine de-watering, domestic and municipal water supply, test pumping, rural and industrial bore-water retrieval and similar ground water projects.

#### **General Application**

Flexibore has been specifically designed to replace rigid riser pipes such as steel which is subject to rust and encrustations. This internal scaling reduces flow rates and pump efficiency. Other risers such as PVC and polypipe can be brittle or bend. They are also generally heavier and hard to handle.







# Ease of Use



## **Easy Installation**

Once in the field, Flexibore is attached to the pump with the patented couplings. The pump, with hose and cables attached, is lowered into the bore using either a simple rolling wheel or a crane. See our installation brochure for further details.

#### **Transportable**

With its continuous length, the hose can be installed with less time and labour than rigid systems, this includes poly pipe. The same advantages apply to pump retrieval.

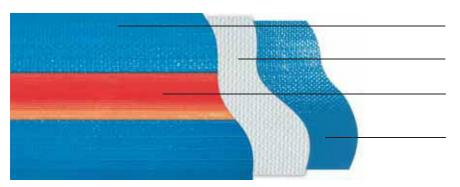
# **Benefits**



#### **Benefits and Cost Saving Features**

- Quick and easy installation and retrieval
- No internal scaling
- ✓ Totally corrosion resistant
- Reduced head losses and improved flow rates due to swelling under pressure
- Less labour intensive due to ease of installation
- Reduced transport costs due to light weight and easy handling
- Custom lengths made to order
- Potable water approved: AS 4020
- All hydrostatically tested





Tough polyurethane cover

Woven polyester fabric

Strip with loops every meter from which to secure power cable

Impregnated polyurethane lining bonded to outer cover which eliminates separation

Each Crusader hose is covered by a 5 year pro-rata warranty against faulty materials and workmanship.

| FLEXIBORE 200 SERIES                         |       |      |      |      |       |       |       |
|--|-------|------|------|------|-------|-------|-------|
| Nominal size (inches)                        | 1 1/2 | 2    | 3    | 4    | 5     | 6     | 8     |
| Internal diameter (mm)                       | 40    | 51   | 76   | 102  | 126   | 152   | 200   |
| Burst pressure (bar)                         | 38    | 74   | 58   | 50   | 50    | 44    | 42    |
| Maximum recommended operating pressure (bar) | 15    | 30   | 22   | 20   | 20    | 20    | 12    |
| Peak Tensile Load (tonnes)                   | 2.1   | 3.2  | 8.3  | 10.0 | 14.5  | 16.0  | 22.0  |
| Max. recommended Tensile Load (tonnes)       | 0.9   | 1.3  | 3.3  | 4.0  | 6.0   | 6.5   | 9     |
| Weight of Flexibore (kg/m)                   | 0.3   | 0.6  | 0.9  | 1.5  | 2.1   | 2.5   | 3.4   |
| Outer diameter of Coupling (mm)              | 70    | 90   | 115  | 140  | 170   | 190   | 270   |
| Weight of coupling stainless steel (kg)      | 2.0   | 2.8  | 5.2  | 7.1  | 11.0  | 12.1  | 41.0  |
| Weight of coupling polymer (kg)              | 0.3   | 0.6  |      |      |       |       |       |
| Weight of water at 10% swell (kg/m)          | 1.52  | 2.38 | 5.49 | 9.89 | 15.09 | 21.96 | 31.00 |
| Maximum flow rate (1/sec)                    | 4     | 6    | 18   | 40   | 55    | 90    | 148   |

NOTE: For OPERATION beyond stated RECOMMENDED OPERATING LIMITS, contact your Flexibore distributor.

| OTHER SPECS                   |        |  |
|-------------------------------|--------|--|
| Maximum operating temperature | 45°C   |  |
| Water pH range                | 4 to 9 |  |
| Maximum pump setting          | 250m   |  |

| Maximum diametric swell | 15%   |
|-------------------------|-------|
| Maximum extension       | 2%    |
| Safety Factor           | 2.5:1 |



**Authorised Distributor**