# IF IT IS A BORE THINK FLEXIBORE100 Flexible Rising Main

CRUSADERHOSE We manufacture in Australia the world's best layflat hose

Flexibore the most cost efficient and effective method for pumping bore water.

AUSTRALIAN MADE



**Flexibore 100** series has been designed to reduce the time of installing bore pumps pumping at shallower depths down to 100m, while maintaining the advantages of a flexible riser. **Flexibore 100** series lends itself to hand and basic installation in rural and domestic applications as well as remote areas with difficult access.



# Flexibore is a flexible riser used for ground water pumping

Flexibore 100 will suit many borehole applications and is compatible with most submersible pumps. The diameters are 32mm & 50mm ID for depths of up to 100m. For deeper applications refer to Flexibore 200.

#### **General Application**

Flexibore has been specifically designed to replace rigid riser pipes such as Poly & PVC which are subject to encrustations resulting in reduced flow rates. Poly pipe can be difficult to remove when the pump requires servicing. There is no safety cable required when using Flexibore due to its high tensile strength.

#### **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.

# **Easy Installation**

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. 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.







Secure Power Cable to Hose



Lower Pump into Bore





Bore Cap attached

Pre-assambled off site and ready to install into bore

# Flexible Rising Main



Poly Pipe 40mm O.D. equivalent to Flexibore 32mm I.D.



No Iron Bacteria build up



Poly Pipe Transport



No Safety Cable necessary



Swells up to 10%



Flexibore 100 easy Transport



## 🕑 Easy installation

The hose is lightweight, easy to handle and can be equipped ready for installation at your premises or on site.

#### 🕑 Continuous length

We will supply the exact length required reducing waste and on site modifications.

#### 🌝 No internal build up

Iron bacteria present in many aquifers will not build up on the inside of Flexibore. The hose swells slightly during pumping, thus no build up occurs inside the riser. This ensures major electricity savings compared to rigid pipes in which the flow can be restricted.

# 🕑 Low friction loss

The slight inherent swell minimizes friction loss resulting in excellent hydraulic performance. The flow rate of 32mm Flexibore compares favorably with 40mm Polypipe

#### 🏏 Transportable

Delivered in a compact reel, the hose is easy to transport, light weight and easy to handle.

# 🕑 No safety cable required

Every hose is hydrostatically tested for tensile strength and pressure rating. 50mm Flexibore has been tested by a NATA laboratory and has a peak tensile load of 3 tonne.

# 🧭 Secure couplings

Total security with industry best, precision engineered and patented couplings. Flexibore is compatible with all types of submersible pumps.

#### 🏏 Easy retrieval

The ease of retrieval is significantly better than any other type of riser. No damage can occur due to kinking

#### 🕑 Cost effective

The savings on quick and easy installation & retrieval, electrical power to maintain flow rates and corrosion resistance ensure Flexibore is the most cost effective riser available.



Cost Savings using	Poly Pipe 40mm x 50m	Flexibore 100 32mm x 50m
Riser	50%	100%
Coupling	30%	100%
Safety Cable	100%	0%
Handling/Off-loading/Storage	100%	40%
Preparation	100%	50%
Travel Cost	100%	50%
Installation/Retrieval Time	100%	65%
Electricity Efficiency Saving per year	100%	70%
Servicing Benefits	Low	High







Each Crusader hose is covered by a 1 year warranty against faulty materials and workmanship.

Strip with loops every two meters from which to secure power cable

PVC Nitrile lining bonded to fabric



# **Data Specification Sheet**

Nominal Size (inches)	11/4″	2″
Internal Diameter (mm)	32	50
Burst Pressure (bar)	70	46
Max. Recommended Operating Pressure (bar)	28	18
Peak Tensile Load (tonnes)	2.0	3.0
Max. Recommended Tensile Load (tonnes)	0.8	1.2
Weight of Flexibore (kg/m)	0.33	0.48
Outer Diameter of Coupling (mm)	65	90
Well/Bore Casing Requirement (mm)	76	102
BSP Coupling Thread Size (mm)	32	50
Weight of Stainless Steel Coupling (kg)	0.6	1.7
Weight of Water at 10% Swell (kg/m)	1.0	2.4
Max. Flow Rate (litres/sec)	2	6

#### **Other Specifications**

Water pH	4 - 9
Max. Swell	10%
Max. Pump Setting	100m
Max. Extension	1%
Max. Operating Temperature	40°C
Safety Factor	2.5:1

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

#### Accessories



Bore Cap



Coupling



Flexibore Joiner



Installation Roller



**Cable Ties** 



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