

## **FEX40-3/4** **Sluice gates**



The two types of adjustable sluice gate, undershot and overshot, are widely used for the control of water in canal systems. In the absence of more accurate devices they may be used for the approximation of flow rates.

Armfield sluice gates are made from stainless steel and plastic and are designed to fit in a rectangular section channel 450mm wide.

Two types are available - undershot (FEX40-3) and overshot (FEX40-4)

### **SPECIFICATION SUMMARY**

**Adjustable undershot sluice gate complete with user instruction sheet**

**Adjustable overshot sluice gate complete with user instruction sheet**

### **OVERALL DIMENSIONS**

580mm x 585mm x 80mm (width 450mm)

### **SHIPPING SPECIFICATION**

**FEX40-3/4:**

Volume: 0.1m<sup>3</sup>  
Gross weight: 20kg

## **FEX40-5/6/7** **Automatic water control gates**

Automatic control gates are used extensively in canal systems for regulating water levels and discharge. They are float operated and are designed to maintain constant levels in the canal so that discharges from offtakes can be kept at a constant rate. Armfield is able to supply models of three types of gate.

# armfield

## **GAUGING AND CONTROL STRUCTURES**

### **FEX40-3-7**

Provisional

*In a surface irrigation distribution network it is necessary to establish a command from which water may be discharged to the area where it will be applied to growing crops. Regulation of discharge, its distribution & disposal is carried out using a range of control structures selected to suit particular situations. In order to familiarise technicians with the mode of operation of a variety of control structures, Armfield has designed & produced a range of demonstration units.*

### **FEX40-5:**

#### **Float operated radial gate**

*This is a counterbalanced radial-type gate which is controlled by means of a displacer located in a chamber. The displacer chamber is fed with upstream water via a vee notch weir and water is discharged from the chamber downstream through a circular orifice. The flow through this orifice may be adjusted by means of a throttle valve, altering the characteristics of the gate as required. The gate, of the undershot type, provides upstream level control and is designed to fit in a rectangular channel section 450mm wide.*

### **SPECIFICATION SUMMARY**

*Float operated radial gate complete with user instruction*

### **OVERALL DIMENSIONS**

Height: 475mm  
Length: 715mm  
Width: 480mm

### **SHIPPING SPECIFICATION**

Volume: 0.3m<sup>3</sup>  
Gross weight: 70kg

## **FEX40-6:**

### **Float operated tilting gate**

*This consists of a gate flap which is hinged at the base, The position of the gate is controlled by means of a displacer housed in a chamber. Water is fed to the chamber from the upstream side over a vee notch weir and discharged downstream through an orifice.*

*A throttle valve allows the orifice flow to be controlled and the gate characteristics to be modified as required. The gate, of the overshot type, provides a further method of control of upstream level and is designed to fit in a rectangular channel section 450mm wide.*

#### **SPECIFICATION SUMMARY**

*Float operated tilting gate complete with user instructions and manual*

#### **OVERALL DIMENSIONS**

*Height: 445mm*

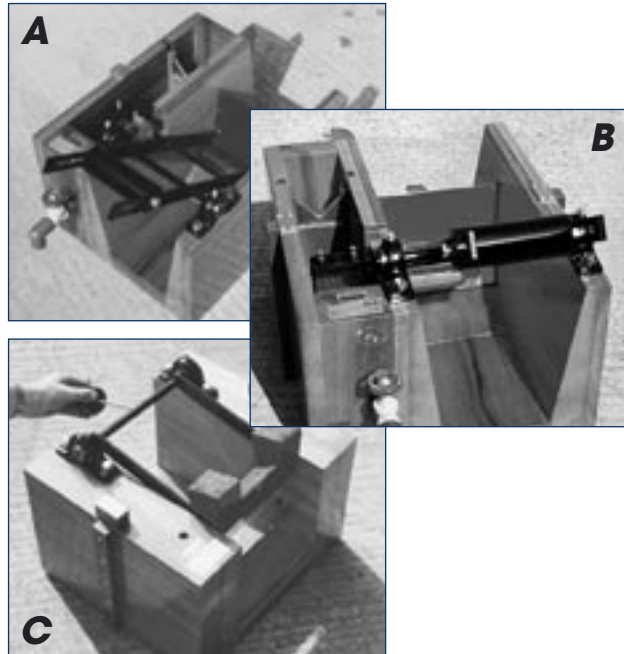
*Length: 470mm*

*Width: 480mm*

#### **SHIPPING SPECIFICATION**

*Volume: 0.3m<sup>3</sup>*

*Gross weight: 70kg*



**A:** FEX40-5: Float operated radial gate

**B:** FEX40-6: Float operated tilting gate

**C:** FEX40-7: Floating weir gate

## **FEX40-7:**

### **Floating weir gate**

*This is a radial-type gate incorporating buoyancy tanks. The gate floats at a constant depth so the head of water over the gate crest therefore the flow, remains constant despite variations in upstream level. The gate is suitable for applications where constant flow is required, for example in irrigation canal offtakes and is designed to fit in a rectangular channel section 450mm wide.*

#### **SPECIFICATION SUMMARY**

*Floating weir gate complete with user instruction sheet*

#### **OVERALL DIMENSIONS**

*Height: 445mm*

*Length: 470mm*

*Width: 480mm*

#### **SHIPPING SPECIFICATION**

*Volume: 0.3m<sup>3</sup>*

*Gross weight: 70kg*

Armfield Limited  
Bridge House, West Street, Ringwood,  
Hampshire BH24 1DY, England

Tel: +44 (0)1425 478781 Fax: +44 (0)1425 470916

E mail: sales@armfield.co.uk

URL: <http://www.armfield.co.uk>

**USA Office:**

Armfield Inc.

436 West Commodore Blvd (#2)

Jackson NJ 08527

Tel: (732) 928-3332 Fax: (732) 928-3542

E mail: [info@armfieldinc.com](mailto:info@armfieldinc.com)