

The EFS 800 electronic yarn feeder is designed for the feeding of elastic and non-elastic yarns, at a constant tension into the knitting machines.

A sensor measures the outgoing yarn tension and regulates the feed speed accordingly. The required yarn tension level is preset by using the keypad. The display shows the actual and preset values for the yarn tension in cN, and the current yarn speed in metres per minute.

The EFS 800 can operate in two modes:

- In the Constant Yarn Tension mode, the feeder regulates the yarn tension so that it remains the same as the preset value, even when the machine is stationary.
- In the Remote Control of Yarn Tension mode, the yarn tension is increased or decreased as demanded by a PCB board which is communicating with the knitting machine.

### **ADVANTAGES**

- Constant yarn tension to ensure an even knit structure with better length and width constancy
- No plating faults during rapid yarn speed changeovers, resulting in less faulty fabric
- Higher machine speeds and fewer stoppages for faults
- Easy to use. Automatic zero-setting of yarn tension sensor. These two features save time and cut costs
- Automatic Wind-On button no manual wind-on required.
- High-dynamics motor. Yarn feed rate and constant yarn tension adjusted in milliseconds
- Programmable yarn tension reduction when yarn is stationary
- Programmable over feed function for secure clamping of the yarn when it is taken out of the knitting position
- Automatic detection of yarn hardness and adjustment to all known yarn types without the need for software modifications



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# Components EFS 800

# TWIN MAGNET BRAKE The twin magnet brake has fine adjustment and is self-cleaning. It is designed to ensure a constant yarn input tension. The upper part has a closing eyelet to prevent the formation of loops as the yarn passes through.

# OPERATOR KEYPAD

Menu-guided operation and simple controls make this practical operator keypad very user-friendly.

### **WIND-ON BUTTON**

Pressing the Wind-On button automatically winds the yarn eight times round the yarn wheel.

# YARN WHEEL

The yarn wheel is light and very strong. This is the ideal combination for dealing with the dynamic stresses transmitted by the motor. Precision yarn take-up ensures optimum winding and prevents overwinding.

### YARN SENSOR

The yarn sensor has a yarn lifter for automatic zero setting. The rapid response sensor ensures optimum adjustment and maintenance of the preset yarn tension level. Rapid signal processing and fast motor regulation ensures that there are no yarn tension peaks.

### **DEVICE VARIANTS**

Additional device variants are available for applications with higher yarn tension. CAN-capable devices are also available. The devices are controlled via machine control or GTN.

### **TECHNICAL DATA**

| Power supply:        | 57 V DC          |
|----------------------|------------------|
| Max current:         | 3 A              |
| Max. power:          | 35 VA            |
| Max. yarn feed rate: | 1.500 m/min      |
| Yarn tension range:  | 0.5 cN bis 40 cN |
| Weight:              | 0.65 kg          |

**EFS**