

®

# MATRIX TEX

## Production Control System

Advanced Production Control  
Systems with IS3F/TS & IS4F/TS  
image sensor series for yarn  
preparation, winding and  
doubling machines

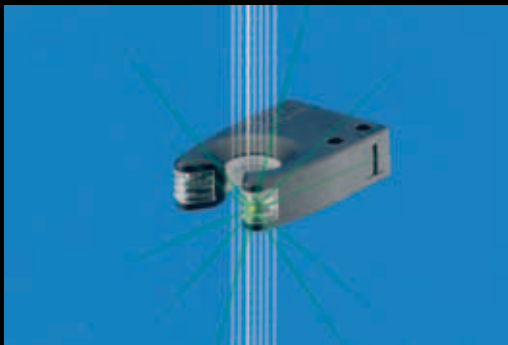


UNI EN ISO 9001-2000

14001-96



The "touch light" function allows for the rapid and precise use of the optic key in the different procedures. Bright (red and green) LEDs are used for control condition and alarm signalling.



Thanks to the bidimensional analysis through optical lens/ceramic unit, you may perform the yarn control either with yarn-lens contact (self-cleaning) or positioning the yarn within the wide reading area (8 mm) without any yarn-lens contact (touch-less).



IS3F/TSL sealed model ensuring total protection (IP67 Certification).



IS4F/TS round closed version with ceramic lens.



Possibility of using the sensors in different applications with any type of yarn; when supported by either external MATRIX TEX or integrated control terminals, the sensors can be adapted to various needs.

## ADVANCED YARN RUNNING MONITORING

MATRIX TEX is an innovative system for an advanced production control on textile machines used in yarn preparation, such as winding, doubling, texturing, sewing machines, etc...

The system can manage up to 200 sensors type series IS3F/TS & IS4F/TS connected to the machine. Thanks to a sophisticated patented technique, these sensors are able to measure and control the image variation of a running yarn put under inspection, indicating with absolute accuracy the relevant running or stop condition of the yarn itself. This device is free from environmental conditions, fully programmable and easily adaptable to the control of any type of yarn without count/typology restrictions.

BTSR has developed a special IS3F/TSL sealed model capable of ensuring total protection (IP67 Certification) in the most extreme environment conditions (oil, dust, water and dirty resistant).

The main programmable functions are the following: Minimum yarn running speed (F. start - F. stop), Sensitivity (10 levels), reaction time (5 to 1000 mSec.), and stop output (normally open / normally closed / impulsive contact). All these functions can be programmed individually for each sensor, thus making the sensor adaptable to the different textile applications.

MATRIX TEX terminal can be used for programming purposes in the initial installation phase or it can remain permanently connected to the machine to perform a continuous and accurate monitoring of your production. Moreover, thanks to an innovative sensor management system and to the use of multi-connector cables (Smart Scanning Sensors), MATRIX TEX does not require complex cabling and lengthy installation times.