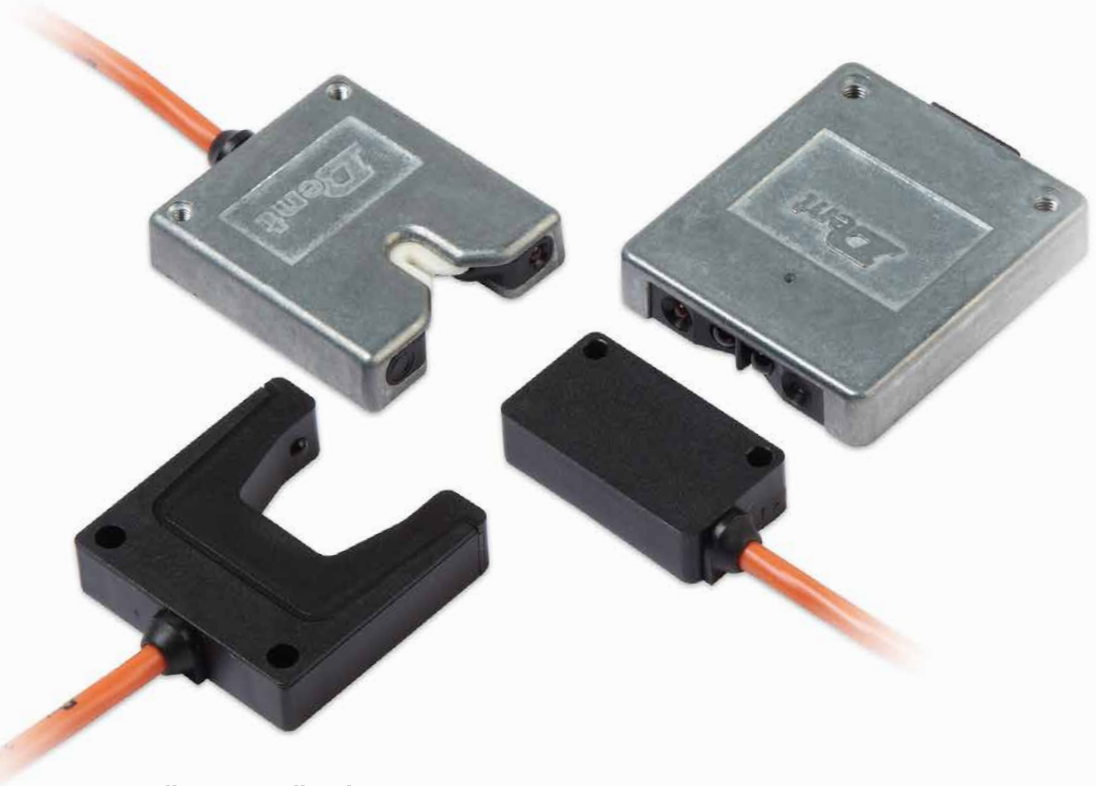


Dent

*Custom-made
textile sensors*

Proven contactless yarn detection

Custom sensors for textile applications



- ✓ For all yarn applications
- ✓ From stock or custom made
- ✓ World's best and most trusted

www.dentsensors.com

Leaders in yarn sensor technology since 1969

It is 50 years since Geoffrey Dent applied for an infrared yarn sensor patent. That was the first appearance of a now indispensable technology that is still evolving.

Textile manufacturers worldwide rely on Dent contactless sensors to prevent yarn problems and help maximise production efficiency.

Dent has a global reputation for producing, very quickly, custom sensors to meet highly specific operational requirements.



Guarantee

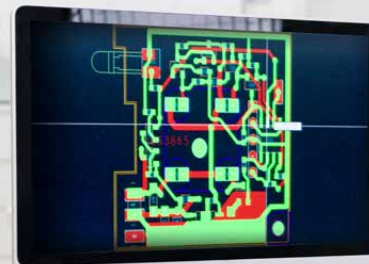
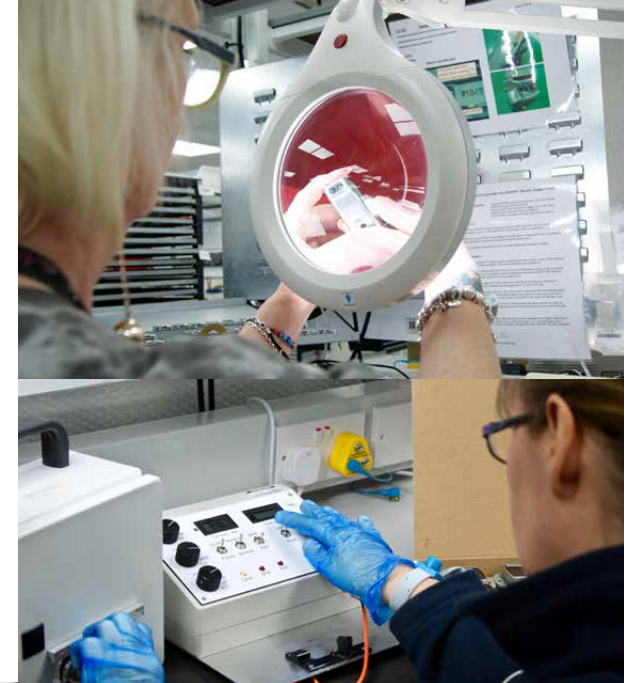
Giving you peace of mind:

All Dent sensors are guaranteed for two years.



Whilst Dent typically manufactures high volumes, we insist on total quality assurance and strive for perfection in everything we do.

Our sensors are renowned for their quality, unmatched reliability and extended operating life. Fully documented component traceability ensures that you can specify Dent sensors with complete confidence.



Dent's rapid prototyping resource supplies custom-made, right-first-time solutions for textile manufacturers specific needs such as tight spaces, unusual angles and demanding operating conditions.

We have the experience to provide yarn sensors for all yarn types. Synthetic and natural yarns and blends: Cotton • Wool • Linen Polyester Nylon • Acrylic • High performance and technical yarns

Trusted by leading textile OEMs

Over 35 years of R&D partnership with many of the world's leading textile machinery manufacturers has resulted in Dent becoming the most trusted name in yarn sensor technology and products.

When even a minor yarn failure can be costly in a fiercely competitive environment, Dent sensors offer reassurance, long product life, unbeatable quality and exceptional value for money.





Custom-made textile sensors

The people who know sensors best

Dent has always led and never followed in the field of contactless yarn sensor technology. As a result, Dent has always been able to attract the best technical people whose talents have in turn helped Dent progress from strength to strength.



Rapid response
Concept to prototype

Design



The problem

Dent investigates yarn detection problems for OEM's new machinery and new developments

We provide the international standard for expertise in critical areas of yarn detection.

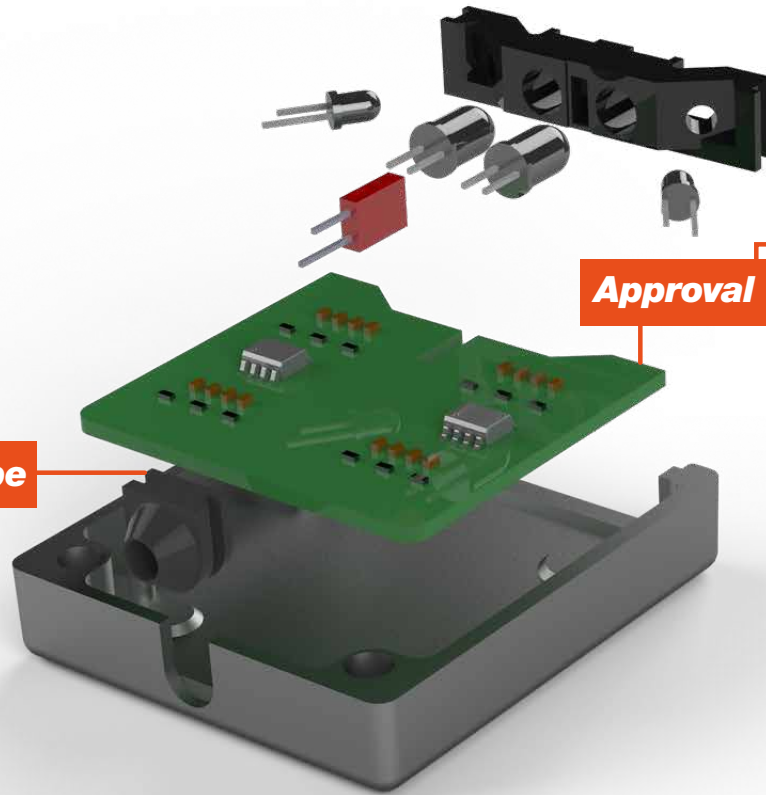
Dent's sensors provide a critical function to ensure optimum efficiency and performance for the world's leading yarn manufacturing machinery producers.

Dent has the expertise and depth of experience to understand the problems.



Dent's in-house R&D team problem solves for OEMs. We produce bespoke designs for swift process integration.

Prototype



Design

Electronic design for analogue or digital electronics, continuous or pulsed outputs, through to PCB layout. Dent's knowledge and expertise solves problems faster.



3D print housing

3D CAD design through to testing, we ensure the best standards are achieved for real-world prototyping.



Working prototype

In-house capability and skill means fast turnaround of prototyping and production development.

Manufacturing processes

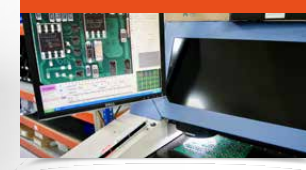
With Surface Mount Technology through to skilled assembly and manufacturing, Dent provides OEMs with what they need, when they need it.



Production



Quality Control



The quality and reliability of our sensors, helps make Dent outstanding. Quality in engineering design and manufacture are key to efficient production.



Guarantee



The solution



- ✓ Efficiency
- ✓ Dependability
- ✓ Reliability

Want to know more?
Call us on:
+44 (0)1282 862 703

or email: enquiries@dentsensors.com



Twin Nelson

Model	Twin Nelson
Yarn Type	POY/FDY
Yarn Speed	Up to 6000 m/min
Voltage	24V DC
Current	32mA
Output	NPN/PNP
Detection	Running/Break
Housing	Diecast

Environmental properties

Operating Temperature	0 to 55°C
Humidity	up to 95%

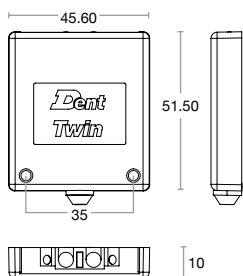
Detection

Optical	Reflective infrared
Output	Constant*

- Twice sensitivity of the Nelson
- Greater Distance
- Fine Yarns
- Coloured Yarns

Physical properties

Mounting pitch	35.0mm
Tolerance	+/- 0.2mm



Yarn pick up

Model	40T
Yarn Type	Cotton
Yarn Speed	N/A
Voltage	24V DC
Current	25mA
Output	NPN
Detection	Presence
Housing	Plastic

Environmental properties

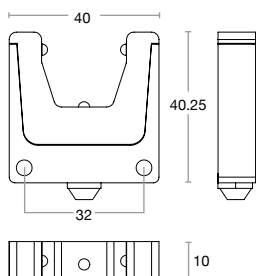
Operating Temperature	0°C to 55°C
Humidity	up to 95%

Detection

Optical	Transmissive infrared
Output	Pulsed/constant*

Physical properties

Mounting pitch	32.0mm
Tolerance	+/- 0.2mm



Drawn texturised yarn

Model	DTY
Yarn Type	DTY
Yarn Speed	Up to 1000 m/min
Voltage	24V DC
Current	30mA
Output	NPN/PNP
Detection	Running/Break
Housing	Diecast or Plastic

Environmental properties

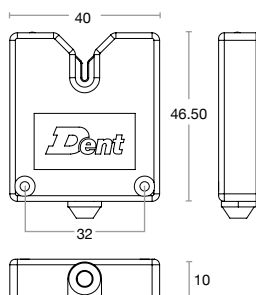
Operating Temperature	0°C to 55°C
Humidity	up to 95%

Detection

Optical	Transmissive infrared
Output	Pulsed/constant*

Physical properties

Mounting pitch	32.0mm
Tolerance	+/- 0.2mm



Roller wrapping

Model	Wrap
Yarn Type	DTY
Yarn Speed	N/A
Voltage	24V DC
Current	25mA
Output	NPN/PNP
Detection	Roller Wrapping
Housing	Plastic

Environmental properties

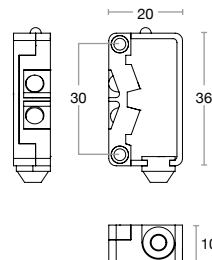
Operating Temperature	0°C to 55°C
Humidity	up to 95%

Detection

Optical	Reflective infrared
Output	Pulsed/constant*

Physical properties

Mounting pitch	30.0mm
Tolerance	+/- 0.2mm



Traversing & straight line

Model	Nelson
Yarn Type	POY/FDY
Yarn Speed	Up to 6000 m/min
Voltage	24V DC
Current	30mA
Output	NPN/PNP
Detection	Running/Break
Housing	Diecast

Environmental properties

Operating Temperature	0°C to 55°C
Humidity	up to 95%

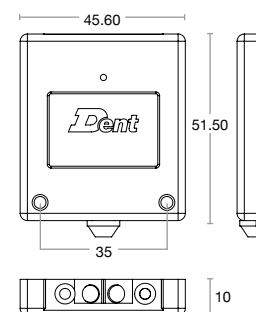
Detection

Optical	Reflective infrared
Output	Pulsed/constant*

Maximum detection distance	8-10mm
Heavy yarn	20mm†

Physical properties

Mounting pitch	35.0mm
Tolerance	+/- 0.2mm



Multiple sensing

Model	Creel Bar
Yarn Type	Any
Yarn Speed	Minimum 0.5m/min
Voltage	24V DC
Current	Dependent on configuration
Output	NPN/PNP
Detection	Movement
Housing	Aluminium Extrusion

Environmental properties

Operating Temperature	0°C to 55°C
Humidity	up to 95%

Detection

Optical	Reflective infrared
Output	Pulsed/constant*

Maximum detection distance	8-10mm
Heavy yarn	20mm†

Physical properties

Pitch	Customer specific
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Dent

Custom-made
textile sensors



The Dent team's mission is to continuously improve its products, its advice and its services to textile machinery manufacturers.

Want to know more?

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or email: enquiries@dentsensors.com

www.dentsensors.com

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Colne, Lancashire BB8 8LY United Kingdom



Certificate Number 12230
ISO 9001