Pressductor Radial load cells
Introduction

ABB's Pressductor® Radial load cells (PRT load cells) are sensitive and accurate yet rugged, reliable and compact. They can withstand high overloads and vibrations, and operate over a wide range of tensions: ideal for any web converting application such as coating, laminating, printing, slitting, winding/unwinding and many others.

The well-proven Pressductor load cells combined with the tension electronics, offer an easy-to-use/ user-friendly web tension measurement system with superior long term performance leading to higher productivity and product quality and higher profit for the web producer.

Increased process uptime
In a web process running continuously, every minute of production time is precious. Even so, no production line runs without downtime.

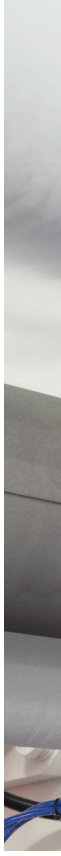
With Pressductor Radial load cells the risk of web breaks can be reduced to a minimum, thus leaving as much time as possible for real production.

Thanks to a strong and stable signal deriving from the PRT load cells, the upcoming web breaks are kept to an absolute minimum level.

Tighter product tolerances
The ability to produce web to tighter tolerances minimizes the costs associated with non-conforming web. It also increases the web producer's accessible market to include products with tighter tolerance requirements.

A Pressductor transducer produces its measurement signal without requiring any physical movement in the transducer measurement element. And it generates a strong signal at comparatively low stress levels. So there is no possibility of fatigue leading to drift and deteriorating measurement performance.

Pressductor Radial load cells
50 years of experience



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01 Pressductor technology – mechanical force alters magnetic field.
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02, 03, 04 Typical PRT load cell installations.

Minimize maintenance
Share the experience, of virtually maintenance-free load cells, with thousands of other Pressductor load cell users. A robust load cell design with no fragile or ageing components makes this possible. Thanks to its robust and compact design, the PRT load cells work consistently for many years without any need for maintenance.

Fast access to support and service
ABB provides customers with superior distinctive after sales service that really differentiates from the competition. You obtain advanced solutions to problems, service and professional consultation through our After Sales Service program. Expert engineers with extensive experience of all types of Force Measurement products are available to assist you through our world-wide network.

There is a shaft-mounted PRT tension measurement load cell suitable for most web processing machinery used in the converting, printing, plastic film, textiles, and other industries.
In the converting industry, the PRT load cells are ideal on machinery for coating, laminating, embossing, and many other processes.

PRT load cells are used on a wide range of printing presses – in both converting and commercial printing as well as newspaper and magazine production.

In the plastics industry, PRT load cells are used to optimize the production and processing of blown and cast film.

And in the textiles industries, machinery applications include nonwovens production as well as finishing operations like bleaching, desizing, dyeing, and printing.

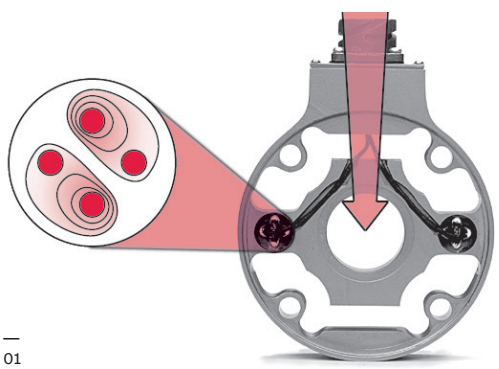
In all web processing areas, PRT load cells are used on the full range of winding machinery, from unwinders to slitter-rewinders.

The Pressductor difference
Like ABB's other load cells based on Pressductor Technology, PRT load cells rely on electromagnetic changes in the transducer, not on physical movement, to sense fluctuations in web tension. The Pressductor Technology operating principle provides exceptional improvements in load cell performance characteristics, including reliability (notably absence of drift), durability, repeatability, and wider measurement range.

Machined from a solid block of steel, the load cells are rugged and stiff, affording high overload protection as well as an extended measurement range above the nominal load. And they do not contribute to machine vibration, even at high speeds.

Since the transducer action – the magnetic flux – takes place inside a steel core, environmental factors like dirt or fluids can't degrade performance and reliability. These stainless steel load cells don't require any physical seals.

Furthermore, low transducer impedance – less than a couple of ohms – helps eliminate susceptibility to radio-frequency and electromagnetic interference.



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