

## Magnetic Field Indicator – Burmah-Castrol

### General Description:

The **Burmah-Castrol Magnetic Field Indicator** is a thin, flexible test strip designed to provide **visual indications of magnetic fields in non-destructive testing (NDT) applications**. It consists of **three precision-engineered layers, each 0.05 mm thick**:

- The **middle layer** is made of a **nickel-iron alloy with high relative permeability**, ensuring **sensitive magnetic response**.
- The **outer layers** are **non-magnetizable**, providing **protection and durability**.



The middle layer features **three parallel slots, 42 mm long**, evenly distributed across the width of the strip. These slots react to applied magnetic fields, producing **visible indications** that help assess **field strength and distribution**.

The Burmah-Castrol Magnetic Field Indicator is available in **two versions: Type I and Type II**.

### Key Differences Between Type I and Type II:

Feature	Type I (General Use)	Type II (Aviation Industry)
Slot Width	Approx. <b>2x wider</b> than Type II	Narrower slots
Sensitivity	Detects magnetic fields at <b>lower field strengths</b>	Higher precision for aviation standards

<b>Typical Applications</b>	<b>General industrial applications</b>	<b>Aerospace and aviation testing</b>
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Type I is suitable for **most magnetic particle testing applications**, while Type II is optimized for **aviation industry standards**, requiring **higher precision and stricter field strength detection**.

### **Burmah-Castrol Magnetic Field Indicator – Data Sheet:**

<b>Parameter</b>	<b>Specification</b>
<b>Material</b>	Multi-layered test strip (Nickel-Iron Alloy Core)
<b>Thickness</b>	3 layers of 0.05 mm each
<b>Slot Design</b>	3 parallel slots, 42 mm long
<b>Available Types</b>	Type I (General Use), Type II (Aviation Industry)
<b>Sensitivity</b>	Type I: Lower field strengths, Type II: Higher precision
<b>Field Strength Detection</b>	Visual indication based on magnetic field presence
<b>Application Areas</b>	General Industry (Type I), Aerospace (Type II)

### **Applications:**

- ✓ **Magnetic Particle Testing (MPI)** – Detecting and analyzing magnetic fields.
- ✓ **Field Strength Verification** – Assessing the presence and strength of residual magnetism.
- ✓ **Aerospace Industry** – Meeting strict aviation industry standards for magnetic field detection.

✓ **General Industrial Use** – Used in **manufacturing, quality control, and material testing.**

The **Burmah-Castrol Magnetic Field Indicator** is a **highly effective and versatile tool** for professionals in **non-destructive testing**, providing quick and reliable **magnetic field visualization.**