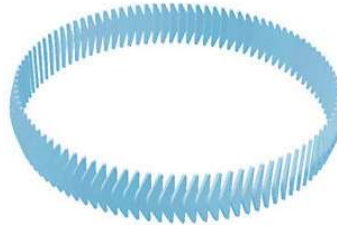


## CONTACT ELEMENT ADVANTAGES

### 1. COMPARISON WITH CONTACT LAMELLA

Contact lamellas are used in high-voltage and medium-voltage applications as well as in other industries. Similar to BAUMANN Contact Elements, contact lamella is a groove connection: a groove in the piston or the housing of the assembly accommodates the contact. BAUMANN Contact Elements have successfully replaced lamella contacts in, for example, 3-position switches, earthing switches, busbar-connections, EPU's, disconnecter switches, plug-in tech, panel coupling and cable ends.



CONTACT LAMELLA

BAUMANN Contact Elements have the following advantages compared with contact lamellas:

- **Large conductor tolerance**

Thanks to their spring characteristics, BAUMANN Contact Elements compensate for a conductor tolerance of IT7 to IT8 (compared with IT4 to IT6 of substitute products). A wide range of tolerances reduces the manufacturing cost of the piston and the housing.

- **Simple groove designs**

The groove that accommodates BAUMANN Contact Elements in the piston or housing has a simple triangular shape. The simple groove shape reduces manufacturing costs and allows an efficient plating process (e.g. silver plating).

- **Convenient and efficient assembly**

The diameter of BAUMANN Contact Elements can be slightly compressed or expanded during assembly. Its assembly does not require any tools. Therefore, assembly line managers prefer BAUMANN Contact Elements because a convenient and efficient assembly reduces lead times.

- **Long product life cycle**

BAUMANN Contact Elements cause less abrasion to the piston and are well suited for dynamic applications. Our customers use BAUMANN Contact Elements in applications with 10,000 cycles and 30 years of maintenance-free life.

### 2. COMPARISON WITH TULIP CONTACT

Tulip contacts are used mainly in high-voltage and medium-voltage applications. BAUMANN Contact Elements have successfully replaced tulip contacts in 3-position switches, busbar-connections, EPU's, disconnecter switches, plug-in tech and MV GIS alignment string.



TULIP CONTACT

BAUMANN Contact Elements have the following advantages compared with tulip contacts:

- **Low space requirement**

BAUMANN Contact Elements can transmit high currents in small spaces. Engineers choose BAUMANN Contact Elements to reduce the size of the total assembly.

- **Constant insertion force**

BAUMANN Contact Elements operate at nearly constant force over a wide deflection range. Typically, the deflection ranges from 5% to 35%.

- **Convenient and efficient assembly**

The diameter of BAUMANN Contact Elements can be slightly compressed or expanded during assembly. Therefore, assembly line managers prefer BAUMANN Contact Elements because a convenient and efficient assembly reduces lead times.

### 3. COMPARISON WITH FLEXIBLE CONNECTIONS

Flexible connections are used mainly in high-voltage and medium-voltage applications. BAUMANN Contact Elements have successfully replaced flexible connections in 3-position switches, EUs and disconnector switches.



FLEXIBLE CONNECTIONS

BAUMANN Contact Elements have the following advantages compared with flexible connections:

- **Good dielectric behavior**

BAUMANN Contact Elements have a symmetric, round-shaped geometry without sharp corners. Their dielectric behavior is superior to many other connection solutions.

- **Low space requirement**

BAUMANN Contact Elements can transmit high currents in small spaces. Engineers choose BAUMANN Contact Elements to reduce the size of the total assembly.

- **Convenient and efficient assembly**

The assembly of BAUMANN Contact Elements does not require any screws, bolts, nuts or tools. Therefore, assembly line managers prefer BAUMANN Contact Elements because the efficient assembly reduces lead times.

### 4. COMPARISON WITH SEGMENTED FEMALE CONTACT

Segmented female contacts are used mainly for electric connectors and shielding applications in the automotive and other industries.



SEGMENTED FEMALE CONTACT

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BAUMANN Contact Elements have the following advantages compared with segmented female contacts:

- [Low electrical contact resistance](#)

The high number of electrical contact points results in a considerably lower electrical contact resistance at a designable insertion force.

- [Low space requirement](#)

BAUMANN Contact Elements are shorter compared with segmented female contacts. Engineers have chosen BAUMANN Contact Elements to reduce the size of the total assembly.

- [High acceptance of mechanical deficiencies](#)

Thanks to their spring characteristics, BAUMANN Contact Elements allow for large fit tolerance and compensate eccentricity and surface deficiencies.

- [Good performance in rough environment](#)

Because each coil acts as an individual, flexible contact point, BAUMANN Contact Elements are comparably insusceptible to vibrations, shocks, temperature changes, dirt and other rough environments.

- [Long life time](#)

Low abrasion and mechanical robustness make BAUMANN Contact Elements suitable for applications requiring a long lifetime and high number of cycles.