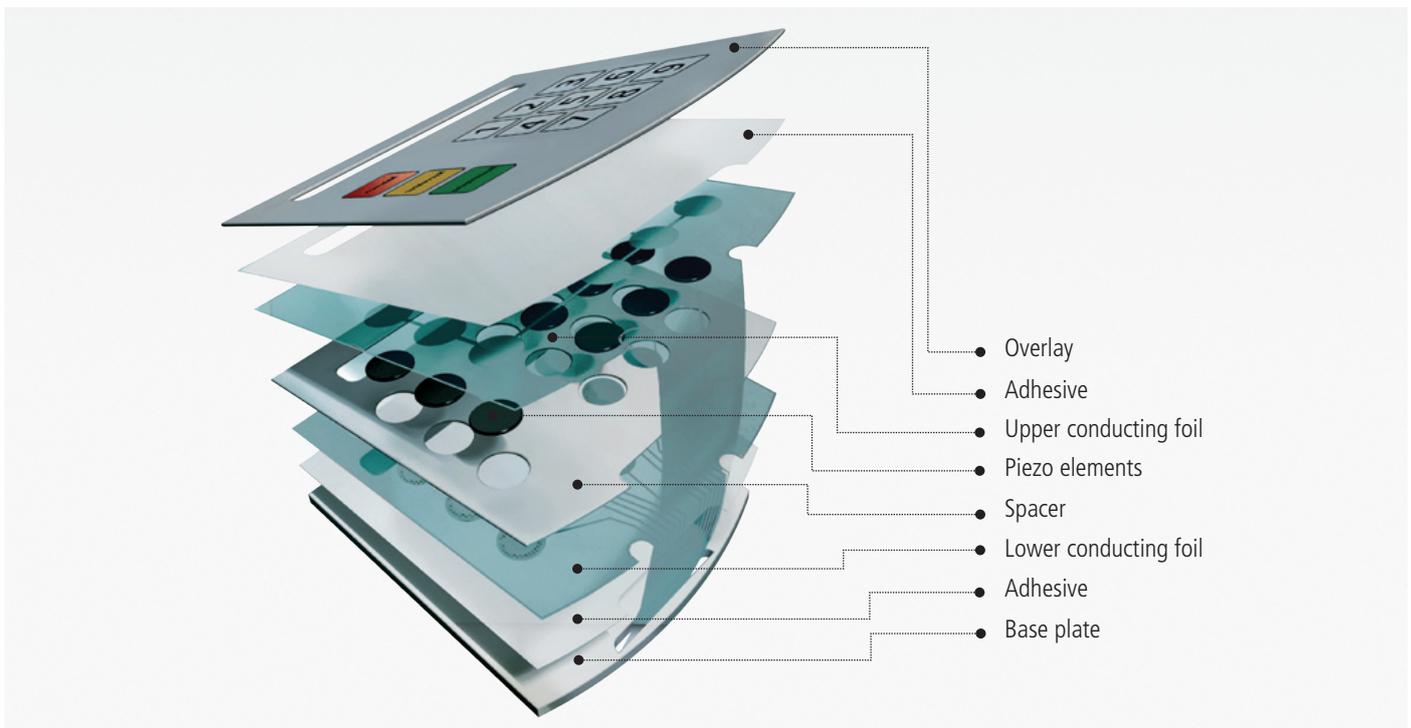


# DYNAPIC®

PIEZO TECHNOLOGY FOR INPUT SYSTEMS  
STRONG, ROBUST AND RESISTANT

ALGRA



***'DYNAPIC® keyboards are extremely robust and resistant.'***

The pressure-sensitive touch technology DYNAPIC® features a ceramic piezo element behind each key. These provide contact with printed conductor films. The entire input system also includes an operating panel (overlay) and a support plate.

There is a wide choice of overlay materials as the switching cycle is triggered by the distortion of the piezo element by just a few micrometers: aluminium, stainless steel, glass or plastic are the most common, allowing the development of extravagant design ideas.

**Application in rough environment:** Resistance to vandalism, guaranteed precise switching and a high degree of user-friendliness are amongst the most important features of this unique flat keyboard.

**Robust construction:** DYNAPIC® consists of different laminated layers. In the key area there are ceramic elements called piezopills. The power generates a charge in the piezopills which is used as a switch signal. The top membrane only goes through a small, elastic deformation. That's why DYNAPIC® keyboards are extremely robust and resistant.

**Intensive use:** The pathless application allows a simple and solid construction with a small depth of installation.

## Advantages

- Vandal resistant
- Suppression of electromagnetic interference
- Much more robust than membrane keyboards
- Insensitive against mechanical wear
- Unaffected by changes in air pressure
- Various overlay materials available
- Adjustable operating force

## Typical applications

- Washing machines
- Dish washers
- Coffee machines
- Chemistry and laboratory instruments
- Cash machines
- Vending machines
- Cashless payment systems
- Weighing and pay stations
- Railway
- And many more

***'Resistance to vandalism, guaranteed precise switching and a high degree of user-friendliness are amongst the most important features of this unique flat keyboard.'***

### Overlay possibilities

Polycarbonat/Plexi:	thickness 0.2–1.0 mm, norm 0.8 mm
Aluminium:	thickness 0.5–1.0 mm, norm 0.5 mm
Stainless steel:	thickness 0.3–0.5 mm
Glass:	thickness 0.5–0.8 mm

The choice of material strength can be influenced by the spacing between the keys.

### Technical data

Operating force:	from 0.1 to 100 N
Required operation speed:	approx. 10 N/s
Maximum cycles per second:	> 1000 Hz
Storage temperature:	-40°C to +85°C
Operating temperature:	-40°C to +85°C
No. of press cycles:	> 10 millions
Voltage typically:	1V/N (burden 10M0hm)
Time constant width typically:	70 ms (burden 10M0hm)

Algra tec AG  
Rigistrasse 1  
5634 Merenschwand  
www.algragroup.ch

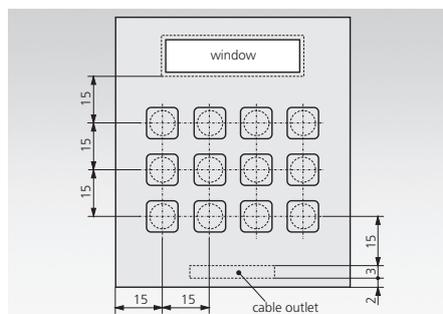
+41 56 675 45 45

gravuretec sa  
Stadtgraben 7  
3235 Erlach  
www.algragroup.ch

+41 32 338 94 44

Trimada AG  
Gewerbering 14  
5610 Wohlen  
www.trimada.ch

+41 56 618 77 00



Algra tec AG  
Rigistrasse 1  
5634 Merenschwand

info@algragroup.ch  
www.algragroup.ch

Switzerland

+41 56 675 45 45

**ALGRA**  
industrial technology

**gravuretec**  
precision works

**connect tec**  
worldwide technologies

**TRIMADA**  
electronic systems

2018/08