Electroactive Polymer Transducer
INNOVATIVE SOLUTION FOR NOVEL ACTUATION TECHNOLOGY

WORKING PRINCIPLE
- Electromechanical transducer made of soft elastic polymer
- Electrical power converted to mechanical motion by elastic deformation
- Reliable electrostatic working principle for multipurpose and efficient operation

A VERSATILE ACTUATION TECHNOLOGY
- EAPs can be used as sensors and actuators
- Flexible EAP portfolio for tailored applications
- Lab-scale production established
- Automated industrial pilot production by 2024

10N
Max. actuation force

5-7 %
Max. contraction

below 2ms
Actuation time

50 Hz
Actuation frequency

-40°C to +130°C
Temperature resistance

APPLICATIONS
1. Valves
2. Haptic feedback interfaces
3. Locks
4. Shutters
5. Switches
6. Pumps and dosing systems

EAPs IN AUTOMOTIVE

TECHNOLOGY BENEFITS
- Zero energy consumption when position holding
- Proportional positioning
- Simultaneous actuation and sensing
- Macro-scale strokes
- Noiseless actuation
- Compact, lightweight and low-cost devices
- Maintenance free for clean environment

CONTACT US FOR FURTHER INFORMATION
fabio.becaloalbuquerque@datwyler.com