

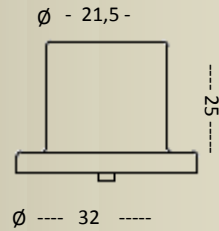
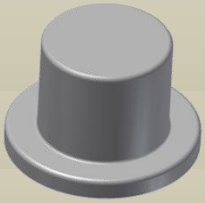
Midi Reserve Battery Family

Available in serial and parallel cell design 1s, 2s, 2p

- Spinning application
- 500 s life time
- 200 J
- 200 mA @ 5 V
- 400 mA @ 2,5 V

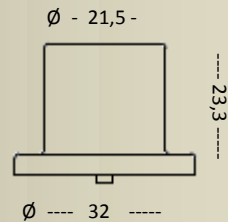
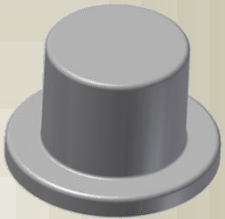
DEP-14020.xx

- Activation at > 900 g's



DEP-14021.xx

- Activation at > 7000 g's



All dimensions in millimeters

Diehl & Eagle Picher (D&EP), a German-American joint venture, develops and produces activatable thermal batteries for defence applications, customized battery packs for the defence and civil market and for 10 years lithium reserve batteries for applications in proximity, time and multifunction fuzes used for mortar, artillery and naval gun ammunition.



More information just scan the QR-code with your smartphone

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DIEHL & EAGLE PICHER
Batterie-Systeme

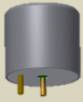
Power Supply Solutions



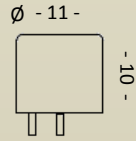
*Family of new
miniaturized energy
sources for fuzes*

Mini Reserve Battery Family

DEP-14103.01



- Activation at > 7000 g's
- No spin
- 20 s life time
- 3 J
- 20 mA @ 2,5 V

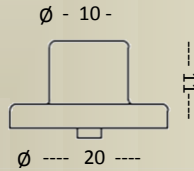


Available in serial and parallel cell design 1s, 2s, 2p

DEP-14202.xx



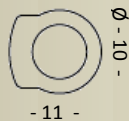
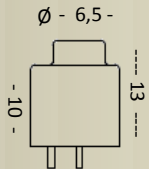
- Activation at > 7000 g's
- Spinning application
- 500 s life time
- 100 J
- 200 mA @ 2,5 V
- 100 mA @ 5 V



DEP-14104.01



- Activation at > 7000 g's
- High spin application
- 100 s life time
- 10 J
- 50 mA @ 2,5 V



All dimensions in millimeters

Thermo-Electric-Power Supply (TEPS)

TEPS is an alternative power source to Reserve Batteries and Set-Back Generators for small and medium caliber fuzes. Set-Back Generators both electromagnetic as well as piezoelectric ones are limited in their energy output by physical constraints in the energy density of their "active" material – magnet or piezo-ceramic. Reserve Batteries are limited by the ability to miniaturization and decreased power capability at low operating temperature. In order to overcome the above limitations of known systems, D&EP has started three years ago to investigate the use of Thermo Electric Generator – using the Seebeck effect for conversion of heat flow into electricity (direct electric conversion) – for generating fuze power. TEPS is a self-contained system – like a battery or a set-back generator – all components are hermetically encapsulated in TEPS' stainless steel housing. Major subsystems are the thermoelectric converter, the heat source (a solid fuel) and the activation system.

Higher energy density than all known set-back generators. Despite the limited efficiency of the thermoelectric conversion, TEPS has more than 10 times the energy density of set-backs.

High power capability; unlike batteries, TEPS has the highest power capability immediately after activation. Power output can be designed independent of energy requirement.

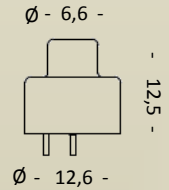
Independent of operating temperature; as the thermoelectric conversion works on a delta-temperature (between hot and cold side). System power and energy are independent of operating temperature.

Thermo-Electric-Power Supply (TEPS)

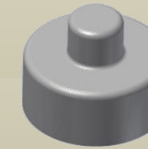
DEP-15001.01



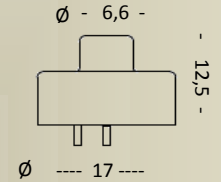
- Activation at > 7000 g's
- 3 s life time
- 100 mJ
- Peak Power 100 mW
- up to 1 V



DEP-15030.01



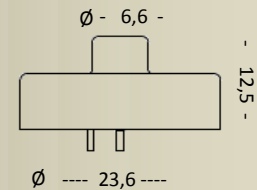
- Activation at > 7000 g's
- 5 s life time
- 200 mJ
- Peak Power 200 mW
- up to 1,5 V



DEP-15060.01



- Activation at > 7000 g's
- 10 s life time
- 2000 mJ
- Peak Power 1000 mW
- up to 2,5 V



All dimensions in millimeters