

FACT SHEET

# 400 V Battery system



#### Process reliable and flexible

Battery systems from ElringKlinger based on prismatic cells

**The prismatic lithium-ion battery system from ElringKlinger represents a 400 V standard for traction batteries.**

The certified system meets the most demanding safety requirements that apply in the automotive industry so it can also be used in off-highway applications such as industrial trucks, leisure applications or stationary storage units.

## Technology

- + isoSPI BMS communication
- + Integrated BMS, high voltage junction box (HVJB), communication interface: four CAN channels, monitoring abilities: SoC, SoH, SoF. Safety functions: over-current protection, cell over- and undervoltage protection, over-temperature protection. PEU (Pressure Equalizing Unit). FuSi level: SW ASIL B, HW ASIL C
- + Bonded cooling plate
- + Interface (HV, LV, cooling) to vehicle: coolant inlet- and outlet temperature, diagnostic- and drive-information via CAN (Controlled Area Network), IL (Integrated Logic), Master-Slave-Option
- + Production-ready assembly technology



#### **ELRINGKLINGER – YOUR PARTNER FOR E-MOBILITY SOLUTIONS WITH BATTERY TECHNOLOGY**

Cell Expertise – Module and System Design –  
Installation Space Optimization – Simulation and  
Testing – Certification – Prototyping – Process  
Engineering – Industrialization – Integrated Solutions  
and Components – Recycling

## Parameters

- + 400 V standard system comprised of 16 prismatic lithium-ion modules (8S2P)
- + Connection in parallel possible to increase the capacity (up to eight systems)

## Benefits

- + Maximum reliability due to functional integration (BMS, CSC, HVJB, PEU, BU)
- + Full system supply
- + Long service life for the system and integrated modules due to sturdy cell clamping concept, high number of charge/discharge cycles
- + Optimized CO<sub>2</sub> footprint

## Specifications

### 8S2P BATTERY SYSTEM

<b>CELL TECHNOLOGY</b>	Lithium ion (NMC)
<b>MODULE TYPE</b>	12s1p, prismatic (PHEV2)
<b>NOMINAL VOLTAGE (V)</b>	350
<b>NOMINAL CAPACITY (AH)</b>	102
<b>NOMINAL SPECIFIC ENERGY (KWH)</b>	35.7
<b>MAX. CONTINUOUS CHARGE CURRENT (A)</b>	153
<b>MAX. CONTINUOUS DISCHARGE CURRENT (A)</b>	204
<b>MAX. PULSE DISCHARGE CURRENT (10 S) (A)</b>	480
<b>DIMENSIONS (MM)</b>	1644 x 990 x 155
<b>WEIGHT (KG)</b>	< 300
<b>SAFETY FEATURES</b>	PEU, TP sensor, BU (Burst Unit), fire-resistant steel housing
<b>LIFE TIME (UNTIL 80 % CAPACITY)</b>	1,500 cycles @ 1 C @ 25°C, up to 4,000 depending on operating strategy & DoD
<b>THERMAL MANAGEMENT</b>	Solution for liquid cooling integrated
<b>ENVIRONMENTAL TEMPERATURE (°C)</b>	Charge: -20 / 45 Discharge: -30 / 60 Storage, transport: -20 / 35
<b>MAX. SYSTEM VOLTAGE (V)</b>	400/800
<b>CONFORMITY</b>	ECE R100, LV124, DIN EN 60664-1, ECE R10, CE, IP6K9K

### YOUR CONTACT

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